

لَا إِلَهَ إِلَّا اللَّهُ مُحَمَّدٌ رَسُوْلُهُ



COMPANY PROFILE

The company's strength stems from its speed in implementing technical studies and speed in executing high-quality work to reach the principle of the general quality of a way of life, thought, culture, and behaviour that is in line with the vision Kingdom of Saudi Arabia 2030

About Us.

WHY LUFTHANSA

Lufthansa International Construction Co. Is a private firm that has a deep rooted experience in general contracting. Our journey began in the United Kingdom. After the success, we decided to convey our vast experience to Saudi Arabia. Lufthansa International Construction Co. work in a safe and in different manner due environmental awareness the management and safety personal take health and safety at work at amater of considerable significance.

Lufthansa International Construction Co. ensures that all statutory and regulatory and contractual obligation in respect to health & safety are fulfilled by making an reasonable practical to integrate all safety measures into project planning.

Our Focus

We have been established to mainly balance the equation of:

- * Our works and Products, we always ensure It will bear added a value to our customers.
- * Our quotations logical and competitive price to satisfy the customer.
- * meeting the requirements of customers



CORPORATE SPECIALTIES

Such as:

- A company specialized in the field of general contracting construction and concrete buildings
- A company specialized in road, bridge and infrastructure works
- A company specialized in MEP, electromechanical and low current works
- We also service offices to support engineering consultancy in the field of engineering consultancy for buibling and architectural ad construction safety.
- Engineering and consultancy is in the field of occupational safety and health , quality and environment

HEAD OFFICE IN UNITED KINGDOM



لوئیسار انٹرنیشنل لمیٹڈ
Leifheiser International Limited





لومنتانرا العالمية المحدودة
Lufthansa International Limited

Lufthansa international believes that safety is a core value that must be built into every aspect of our work, not added on as an afterthought.

OUR SAFETY POLICY

It is the primary and continuing policy of Lufthansa international that in the conduct of its activities it will endeavor to protect the health and safety of its employees, and others who may be affected by these activities. We endeavor to limit adverse effects on the physical environment where its activities are carried out.

OUR SAFETY PLAN

Lufthansa international is committed to a strong Safety Plan that protects all its resources from accidental loss including employees, property, and client resources. The Company believes the benefits of such a plan are not only for the health and welfare of its employees, but for the successful completion of the work.

SAFETY RIGHTS AND RESPONSIBILITIES

Employees at every level, including management, are responsible and accountable for Lufthansa international overall safety initiatives. Management is committed to providing a safe and healthy work environment, and to work in a spirit of consultation and cooperation with the workers. Lufthansa international recognizes the right of workers to work in a healthy work environment. An injury- and accident-free workplace is our objective.

OUR COMMITMENT TO SAFETY

Our commitment is demonstrated in how we invest in the best and highest-quality training and equipment, and continually look for opportunities to improve processes and practices. Complete participation by everyone, every day is necessary for a safe and healthy workplace. All Lufthansa employees take ownership of their responsibility to maintain a safe workplace for themselves, their co-workers, our customers, and business partners.



Vision & Mission



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Our Purpose

Lufthansa international construction co . Affiliated to the Lufthansa Trading Group Limited - London - Britain We have a vision linked to Kingdom's vision to become indispensable partners in the journey for instant growth and excellence of all the individuals and organizations associated with us.

Vision

in line with the vision of Kingdom of Saudi Arabia to bring new opportunities for investment and open new doors and horizons for foreign investors , the Lufthansa International Trading Group Limited decided to open an independent branch in the Kingdom of Saudi Arabia , and based on the vision of Kingdom of Saudi Arabia 2030 in merging foregin companies with Saudi companies and Saudi sectors .

Merger and purchase of Saudi companies in other specialized fields to raise the efficiency of Lufthansa in the Kingdom of Saudia Arabia



لومنتايرا العالمية المحدودة
Lufthansa International Limited

SAFETY POLICY

execute construction projects in a safe, effective, and environmentally conscious manner.

The management team and safety personnel place a high value on health and safety work. guarantees that all legal, contractual, and regulatory requirements related to health and safety are met.

We strive to the best of our abilities to protect the health and safety of all people, including the general public, affected by our projects by making a conscious effort to incorporate all reasonably practicable safety measures into project planning, by providing personal protective equipment, safety training, and information to all of our workers concerned, and by deploying competent trained safety professionals in safety management, safety training, and supervision.





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

QUALITY POLICY

By implementing strategies for continuous improvement and routinely evaluating the efficacy of the quality management system ,We are dedicated to achieving customer satisfaction.

1. Provide dependable , prompt , and cost-effective services that are performed at a high standard of professionalism and integrity.
2. Offer services that are always performed in accordance with the declared standard procedure and the needs of the customer.
3. Lufthansa has created to put into practice an efficient quality management system that is constantly being enhanced. These procedures are subject to audits





لومينهارا العالمية المحدودة
Lufthansa International Limited

COMPANY MANPOWER

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لوقمارا المافراة الممودة
Emaar International Limited

ORGANIZATIONAL STRUCTURE





لوفتهانزا انترناشيونال ليميتيد
Lufthansa International Limited

SAFETY CONSULTANCY OFFICES

Here we have the privilege of having the OSHAcademy, NASP, IOSH, STI, IRCA, Scaffold Training Institute. We also offer a wide range of HSE training certification that is recognized and used by government agencies, colleges, hospitals, educational institutions, businesses and individuals across the world. Our training programs educate your employees about health & safety, environmental and quality issues in the workplace. We take pride in employing a variety of competent, accredited and multilingual trainers so that training may be provided in the language of your desire.



We also provide a comprehensive portfolio of training services covering a wide range of compliance and business improvement issues.

- * HSE management
- * Process safety
- * Occupational hygiene and safety at work
- * Fire safety
- * Evacuation Plans



لؤلؤة البترول العالمية المحدودة
Luffchause International Limited

OUR ACCREDITATIONS





لوهاتشوا العالمية المحدودة
Louhachoua International Limited

OUR CLIENTS





لوطيانزا الدولية
Lufthansa International Limited

OUR PROJECTS



Expansion of Masjid al-Haram



The Clock Tower Makkah



King Abdulaziz International Airport



King Abdallah Economic City



NEOM



Al-Ula city



شركة الخليج العقارية
Gulf Housing International Limited

OUR PROJECTS



KAUST



ASCOTT



CENTRO



CITADINES AL SALMAN JEDDAH



FARSI SEVEN



AL-MUZAHIMIYAH MALL



لوسان انترناتيونال ليميتيد
Lufthansa International Limited

OUR PROJECTS



P&G Jeddah



Damac Tower Riyadh



Dhahban Central Prison

OUR PROJECTS IN SAUDI ARABIA



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



مكة

جدة

نيوم

العلا

الرياض



CONSTRUCTION MANAGEMENT METHODS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SAFETY STATEMENT

Vital to our company philosophy is our commitment to the **health** and **safety** of our staff. We are firm on meeting industry standards and fulfil all safety requirements. The health and safety of our people is of **highest priority** and cannot be compromised.

QUALITY STATEMENT

We adhere strictly to local and international quality and safety standards. Our **Quality, Health** and **Safety Policies** underline the importance of an **incident-free environment**. At **CONCEPTM**, we are committed to the health and safety of our employees, and continuously strive to improve our quality standards to meet the international quality requirement. We are proud holders of international accreditations and carry out our procedures in accordance with **ISO 9001:2008**.



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

ENVIRONMENT STATEMENT

We recognize that our projects have an impact on the environment. Astra Construction is committed to ensuring that all our projects and activities are undertaken through the adoption of a realistic and hands-on approach to environmental matters. Astra Construction is a holder of ISO 14001:2015.

ISO 9001:2008

Quality Management System

ISO 14001:2015

Environmental Management System



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

مكان المشروع	وصف المشروع	الهيئة المالكة
الرياض	مول المزاخمية	SBCM
جدة	إسكان فلل	صندوق الخير المالي مجموعة اربن القابضة
جدة	١٨ فيلا بابحر الشمالية	ايعان الحديثة للاستثمار العقاري
جدة		صندوق الخير المالي مجموعة اربن القابضة
جدة	١٨ فيلا بابحر الشمالية	شركة كمال خطيب للمقاولات
جدة	٢ - مكون من ٢ فيلا دوبلكس	تنمية التراث للتطوير العقاري
المدينة المنورة	المنورة مكون من ٤ فيلا سكنية	تنمية التراث للتطوير العقاري
جدة	قصر - شرما - مشروع نيوم	شركة السيف مهندسون ومطورون
الرياض	برج داماك اداري وسكي	داماك
جدة	فندق اسكوت	شركة الاطيف القابضة
جدة	فندق سيتادينز	شركة الاطيف القابضة
جدة	صالة الحجاج	مطار الامير الملك عبد العزيز
حائل	إسكان أعضاء هيئة التدريس بجامعة حائل	وزارة التعليم العالي
جدة	مبنى معامل بجامعة ام القرى	جامعة ام القرى
مكة	مستودعات الرصيفة	مجموعة بن لادن
جدة	اعمال انشاء وحدات صرافة المنطقة الغربية	بنك الجزيرة
مكة	الورشة المركزية للمعدات	شركة مواد الاعمار القابضة
مكة	مصنع حديد وصلب	شركة هاي تك القابضة
جدة	معرض باريس غاليري	
تبوك	كلية البنات بحقل	وزارة التعليم العالي المقاول العام - شركة صرح التقنية للمقاولات
مكان المشروع	وصف المشروع	الهيئة المالكة
جدة	المجمعات السكنية	مجموعة بن لادن
جدة	مشروع تطوير المارين - درة العروس	شركة دلة
المدينة المنورة	مشروع تطوير المتحف الدولي للسيرة النبوية	رابطة العالم الإسلامي
مكة	والخرسانات - تطوير مطاف	مجموعة بن لادن
جدة	اعمال أنظمة الحريق واعمال التشطيبات - قصر الجزيرة	مجموعة بن لادن
جدة	مشروع انشاء صيدليات النهدي	شركة النهدي الطبية
مكة	الذايدي - منطقة	الشيخ فايز السهلي
جدة	مشروع تطوير مطاعم	مجموعة تاج القابضة
جدة	درف ثرو	شركة رؤى كابيتال
جدة	مشروع تطوير مبنى الادارة الرئيسي	شركة بروكتر آند جامبل
جدة	مسرّ وع تطوير الوحدات السكنية	شركة اعمار

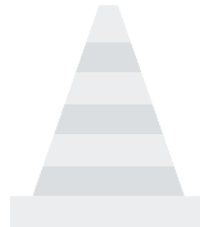


لوفتهانزا العالمية المحدودة
Lufthansa International Limited



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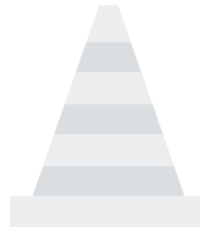


لوفتهانزا العالمية المحدودة
Lufthansa International Limited



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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

01 ABOUT US



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

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Lufthansa International Limited

02 VISION & MISSION



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

THE VISION & MISSION

Our purpose

The company's strength stems from its speed in implementing technical studies and speed in executing high-quality work to reach the principle of the general quality of a way of life, thought, culture, and behavior that is in line with the vision. Kingdom of Saudi Arabia 2030.

Vision

In line with the vision of the Kingdom of Saudi Arabia to bring new opportunities for investment and open new doors and horizons for foreign investors, the Lufthansa International Trading Group Limited decided to open an independent branch for the Kingdom of Saudi Arabia, and based on the vision of the Kingdom of Saudi Arabia 2030 in merging foreign companies with Saudi companies and Saudi sectors. Merger and purchase of Saudi companies in other specialized fields to raise the efficiency of Lufthansa in the Kingdom of Saudi Arabia



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

CORPORATE SPECIALTIES

Such as:-

- A company specialized in the field of general contracting, construction and concrete buildings
- A company specialized in road, bridge and infrastructure works
- A company specialized in MEP, electromechanical and low current works
- A company specialized in finishing works and also owns factories in the same service field
- We also have service offices to support engineering consultancy in the field of engineering consultancy for building and architectural and construction public safety.
- And engineering consultancy in the field of occupational safety and health, quality and environment



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



SAFETY POLICY





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SAFETY POLICY

execute construction projects in a safe, effective, and environmentally conscious manner. The management team and safety personnel place a high value on health and safety work. guarantees that all legal, contractual, and regulatory requirements related to health and safety are met. We strive to the best of our abilities to protect the health and safety of all people, including the general public, affected by our projects by making a conscious effort to incorporate all reasonably practicable safety measures into project planning, by providing personal protective equipment, safety training, and information to all of our workers concerned, and by deploying competent trained safety professionals in safety management, safety training, and supervision.



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



QUALITY POLICY



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QUALITY POLICY

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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

05 COMPANY MANPOWER



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

COMPANY MANPOWER

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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

06 COMPANY EQUIPMENT





COMPANY EQUIPMENT

سنة الصنع	العدد	Asset Name	اسم المعدة	No.
2022	2	Asphalt Paver (VOGELE Super1800-3)	فراطة أسفلت	1
2019 - 2017	2	Asphalt Paver (DYNAPAC)	فراطة أسفلت	2
2013	1	Asphalt Paver (VOGELE Super1600-2)	فراطة أسفلت	3
2022	1	Hamm Tandem Vibratory Roller	رصاصه حديد	4
2017	2	DYNAPAC Tandem Vibratory Roller	رصاصه حديد	5
2021	1	CAT - CB2.7 120	رصاصه حديد	6
2017	1	Bomag 75	رصاصه حديد	7
2015	1	Bomag 65	رصاصه حديد	8
2022	2	Hamm Rubber Wheeled Roller	رصاصه كفاترات	9
2017	2	DYNAPAC Rubber Wheeled Roller	رصاصه كفاترات	10
2013	2	DYNAPAC Rubber Wheeled Roller	رصاصه كفاترات	11
2015	2	Stiel Steer Loader	شبول بوب كات	12
2022	1	Stiel Steer Loader (CAT 262 D3)	شبول بوب كات	13
----	6	Asphalt Cutter	منشار أسفلت	14
----	8	Jumper Compactor	طباشة أسفلت	15
----	1	Tank MC1	صهريج	16
----	1	Tank RC2	صهريج	17
----	160	Tipper Truck	تريلات قلاب	18
----	20	Wheel Loader	شبول	19
----	50	Excavator	بوكاين	20
----	9	Grader	ممهدة طريق	21
----	13	Compactor Soil	رصاصه ترابية	22
----	11	Bulldozer	بلدوزر	23
----	28	Dump Truck	دناير	24
----	7	Water Tank	صهريج مياه	25
----	3	Road Marking Paint	ماكينة طلاء علامات الطرق	26



COMPANY EQUIPMENT

 <p>Steel Steer Loader شبول بوب كات</p> <p>3</p>	 <p>Rubber Wheeled Roller رصاصه كرفرات</p> <p>6</p>	 <p>Tandem Vibratory Roller رصاصه حديد</p> <p>6</p>	 <p>Asphalt Paver مراة اسفلت</p> <p>5</p>
 <p>Excavator بوكلين</p> <p>50</p>	 <p>Wheel Loader شبول</p> <p>20</p>	 <p>Tipper Truck تربلت قلاب</p> <p>160</p>	 <p>Tank صهورج</p> <p>2</p>
 <p>Water Tank صهورج مياة</p> <p>7</p>	 <p>Dump Truck دناير</p> <p>28</p>	 <p>Bulldozer بلدوزر</p> <p>11</p>	 <p>Grader معهودة طريق</p> <p>9</p>
 <p>Compactor Soil رصاصه ترابية</p> <p>8</p>	 <p>Jumper Compactor طباشه اسفلت</p> <p>8</p>	 <p>Asphalt Cutter مشار اسفلت</p> <p>6</p>	 <p>Road Marking Paint ماكينة طلاء علامات الطريق</p> <p>3</p>



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

07

COMPANY CERTIFICATES



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

08 SAFETY CONSULTANCY OFFICES AND CERTIFICATES





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SAFETY CONSULTANCY OFFICES

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- HSE management
- Process safety
- Occupational hygiene and safety at work
- Fire safety
- Evacuation Plans



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

OUR ACCREDITATIONS





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

٩ OUR CLIENTS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

LIST OF CLIENTS

جامعة الملك عبد الله
للعلوم والتقنية
King Abdullah University of
Science and Technology



الاتحاد السعودي للسيارات والدراجات النارية
Saudi Automobile & Motorcycle Federation



الهيئة السعودية للمهندسين
SAUDI COUNCIL OF ENGINEERS



الهيئة العامة للطيران المدني
General Authority of Civil Aviation



المجدوعي
Almajdouie



مجموعة بن لادن السعودية
SAUDI BINLADIN GROUP

مصرف الإنماء
alinma bank



الأهلي NCB



مستشفى باقو والدكتور عرفان العام
Dr. Erfan & Bagedo General Hospital
Est. 1981



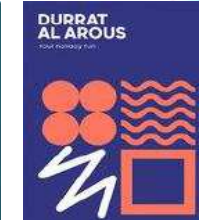
Princess Nourah Bint
Abdulrahman University

تاج القابضة
TAJ HOLDING

مستشفيات السعودي الألماني
SAUDI GERMAN HOSPITALS



النهدى
nahdi





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GENERAL PROJECTS





LIST OF PROJECTS

The Owner	Project Description	Project location
Binladin Group	Residential complexes	Jeddah
Kamal Khatib Contracting Company	18 villas in Obhur Al-Shamaliyah	Jeddah
Dallah Company	Marine Development Project - Durrat Al-Arous	Jeddah
Islamic world Union	Project to develop the Islamic Museum	Medina
Binladin Group	Project implementation of block and concrete works	Mecca
Binladin Group	Fire systems and finishing works - Al Jazeera Palace	Jeddah
Nahdi Medical Company	Nahdi pharmacies construction project	Jeddah
Sheikh Fayez Al-Sahli	A project to establish a private palace - Al-Zaidi area	Mecca



LIST OF PROJECTS

The Owner	Project Description	Project location
Taj Holding Group	Restaurant development project	Jeddah
Emaar Company	Residential development project	Jeddah
Islamic Bank	Hangar Islamic Bank	Jeddah
Damac	Damac Administrative and Residential Tower, Jeddah Corniche	Jeddah
Ministry of Higher Education	Housing for faculty members at the University of Hail	Hail
SBCM	Al Muzahimiyah Mall	Riyadh
Umm Al Qura University	Laboratory building at Umm Al-Qura University	Jeddah
Atyaf Holding Company	Ascot Hotel	Jeddah



LIST OF PROJECTS

The Owner	Project Description	Project location
Atyaf Holding Company	Citadines Hotel	Jeddah
Binladin Group	Rusaifa warehouses	Mecca
Al Jazeera Bank	Construction of exchange units in the western region	Jeddah
The Financial Expert Fund, Aren Holding Group	Villa housing	Jeddah
Hi-Tech Holding Company	Iron and steel factory	Mecca
Saline Water Conversion Corporation	Shuaiba desalination plant	Jeddah
Ataa Al-Khair Foundation	Ata Al Khair Building and Hangar Project	Jeddah
Abdul Latif Jameel	Abdul Latif Jameel Hotel Project	Mecca



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

KAUST

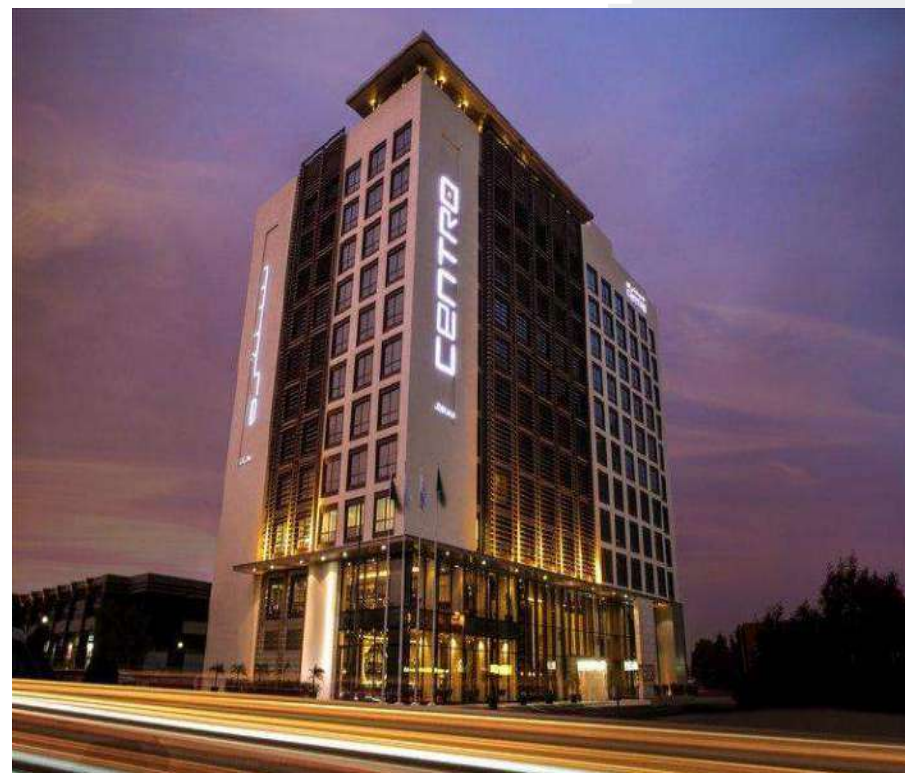
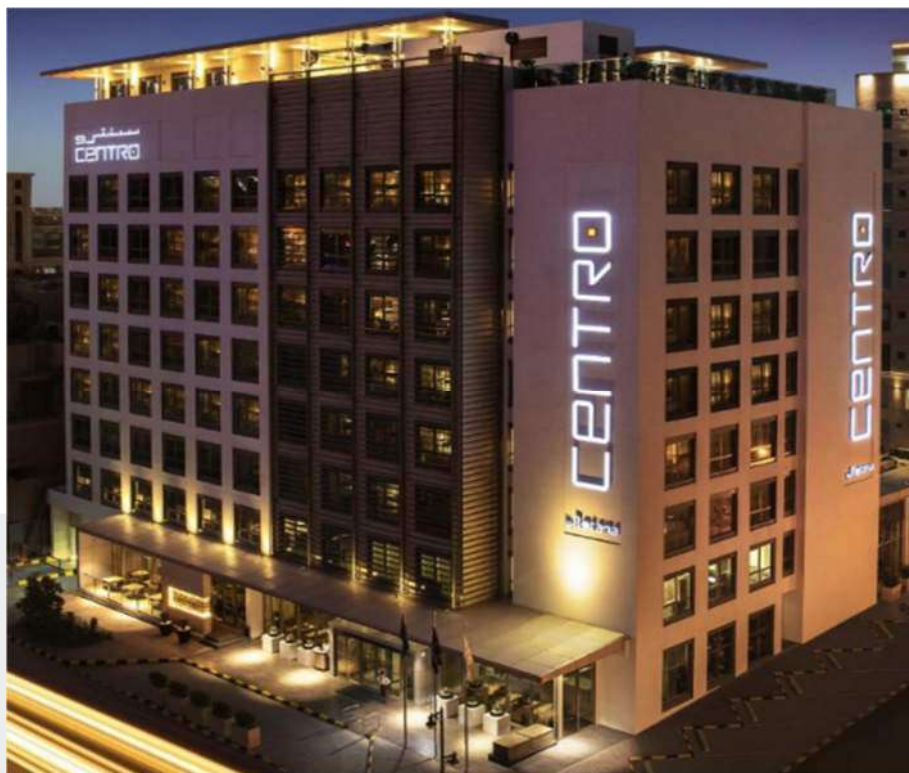




لوفتهانزا العالمية المحدودة
Lufthansa International Limited

CENTRO

Finishing

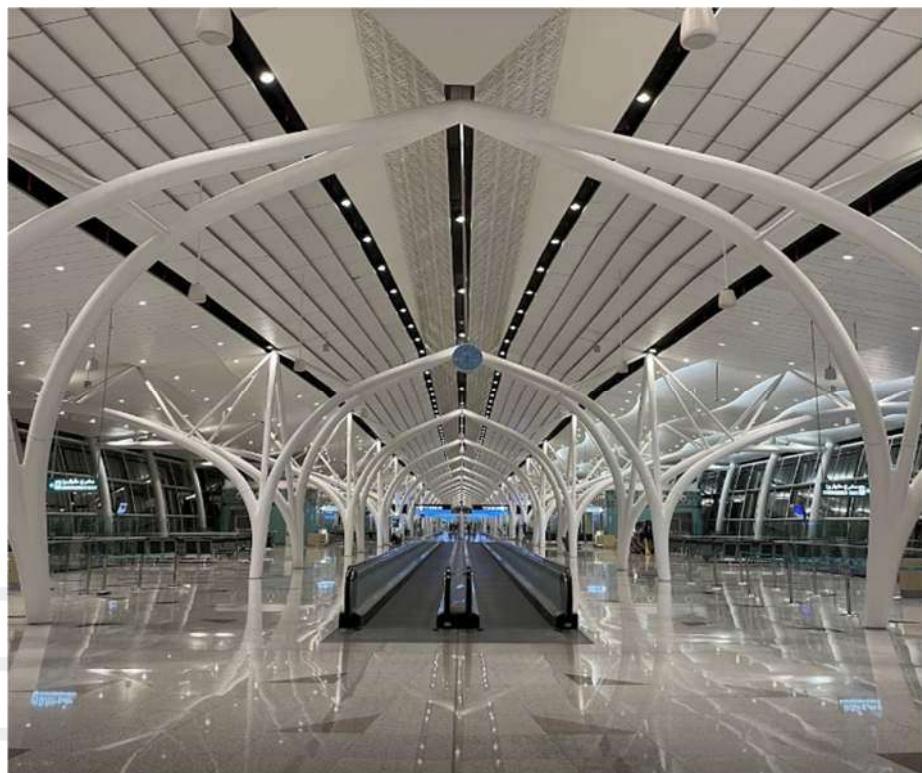




لوفتهانزا العالمية المحدودة
Lufthansa International Limited

KING ABDULAZIZ INTERNATIONAL AIRPORT

Redevelopment and rehabilitation





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

ASCOTT

Full finishes





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

FARSI SEVEN

Finishing work





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Lufthansa International Limited



CITADINES AL SALAMAH JEDDAH

Finishing work





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

AL-MUZAHIMIYAH MALL

Construction and finishes





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

AL AREEN HOUSING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Rusaifa warehouses





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Lufthansa International Limited

SPECIALIZED WORKS IN THE FIELD OF GENERAL CONTRACTING, CONSTRUCTION, AND INFRASTRUCTURE WORKS





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Lufthansa International Limited

WAAD ACADEMY





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Lufthansa International Limited



AMAZON WAREHOUSE

Construction and finishes





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DAMAC AL JAWHARAH





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Lufthansa International Limited

Housing villas

Finishing project





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MODEL SCHOOLS PROJECT





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OUR EQUIPMENT IN THE METAL FORMING BUSINESS



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Our equipment





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Our equipment





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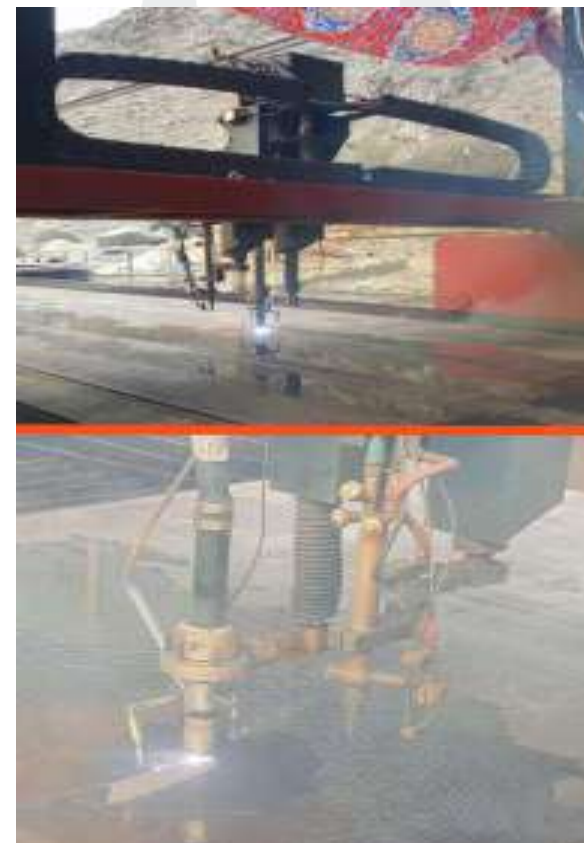
Our equipment





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Our equipment





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Our equipment





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SPECIALIZED IN METAL FORMING WORKS



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Aluminium and steel works





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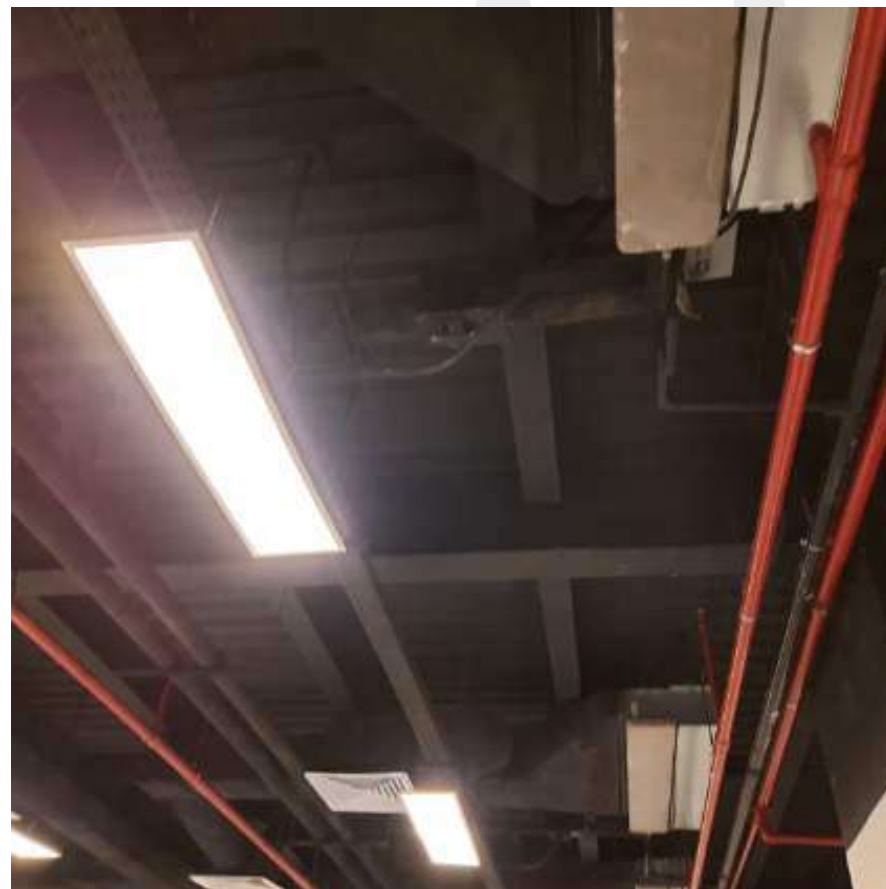
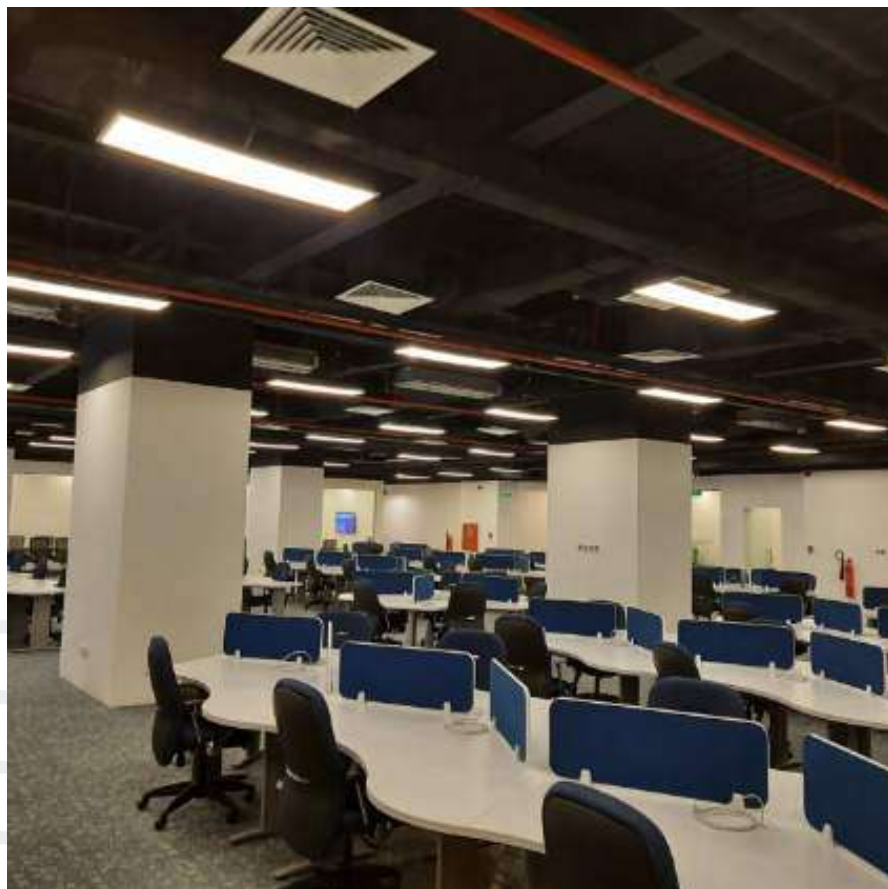
Aluminium and steel works





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Lufthansa International Limited

Aluminium and steel works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Aluminium and steel works





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Lufthansa International Limited

Aluminium and steel works





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Aluminium and steel works





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Lufthansa International Limited

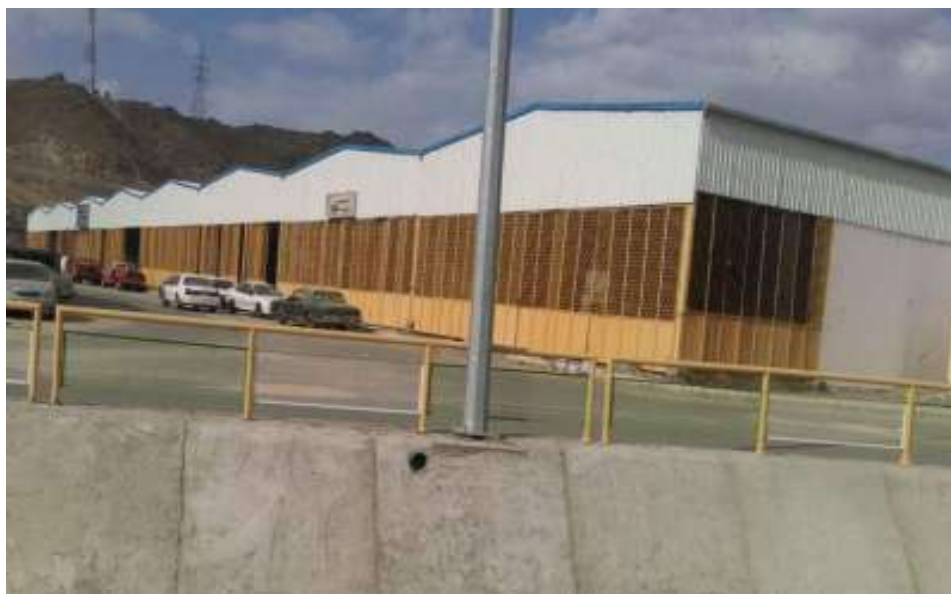
Aluminium and steel works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Aluminium and steel works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Aluminium and steel works





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Aluminium and steel works





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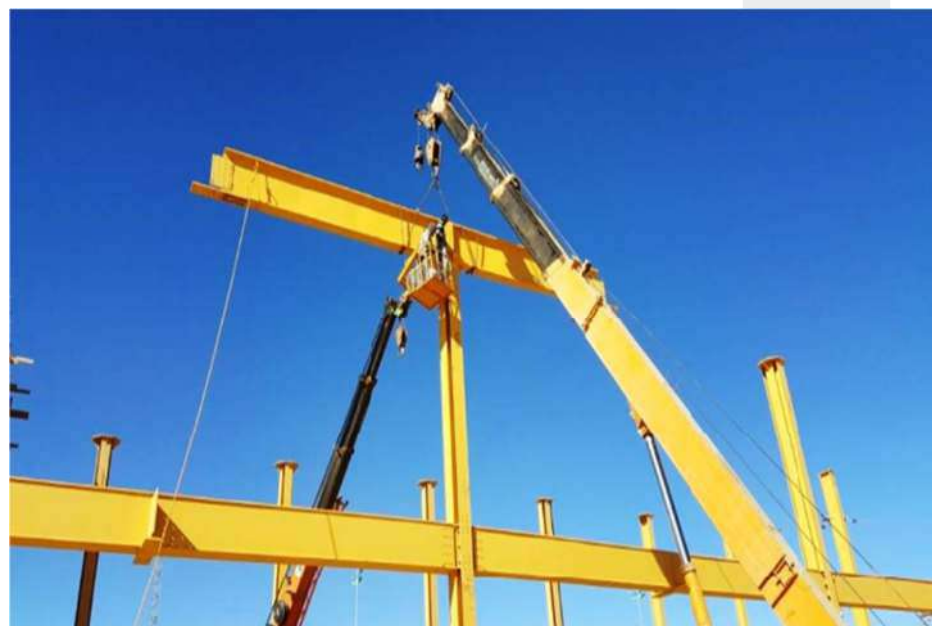
Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Aluminium and steel works





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Finishing works – Boston - USA





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Finishing works - Canada





لوفتهانزا العالمية المحدودة
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Finishing works – New Zealand





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Finishing works - Turkey





لوفتهانزا العالمية المحدودة
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Finishing works - Turkey





لوفتهانزا العالمية المحدودة
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Finishing works - Turkey





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Finishing works - Turkey





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Finishing works– Abu Dhabi – U.A.E





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Finishing works - Turkey





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Finishing works - Turkey





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Lufthansa International Limited

Finishing works - Turkey





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Finishing works - Bulgaria





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

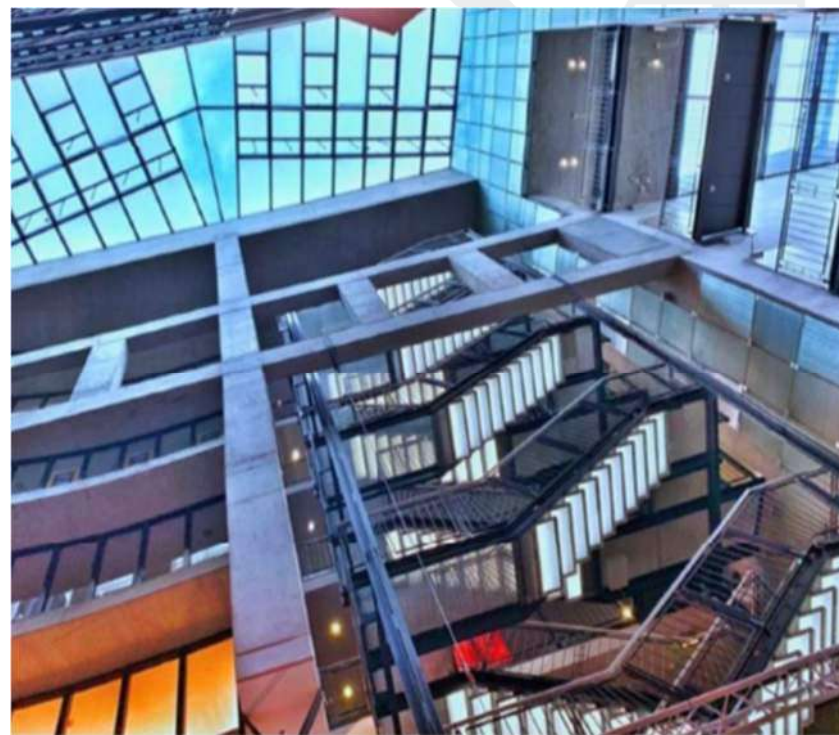
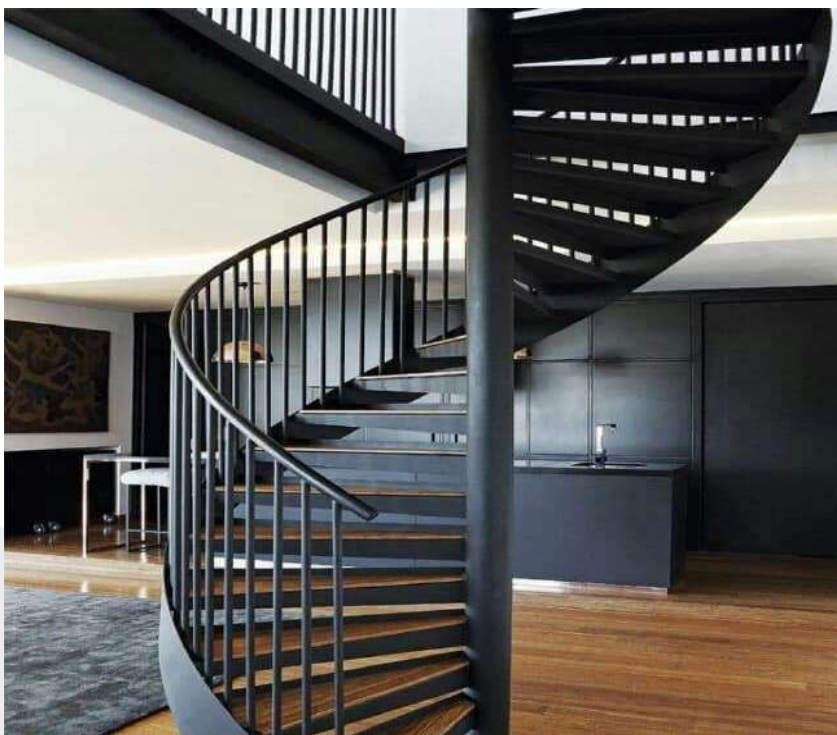
Finishing works - Turkey





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Aluminium and steel works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Aluminium and steel works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

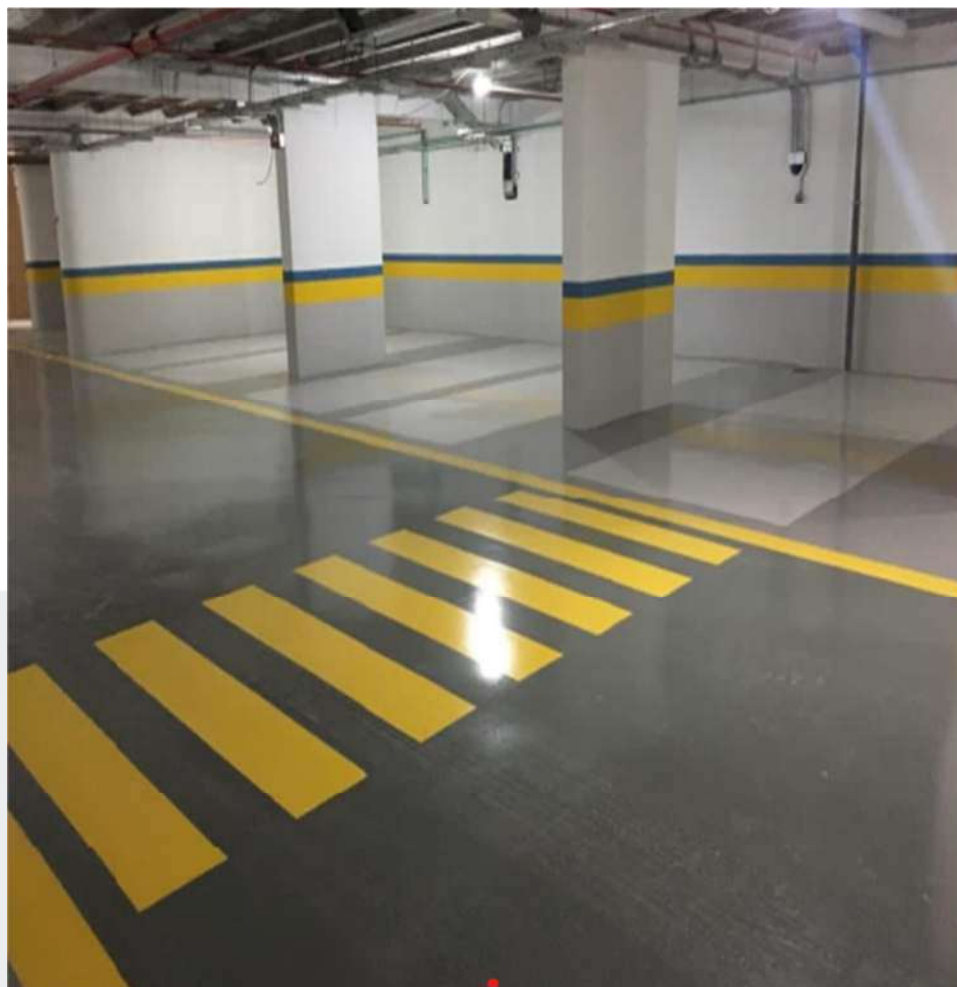
SPECIALIZED IN WATERPROOFING WORKS





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

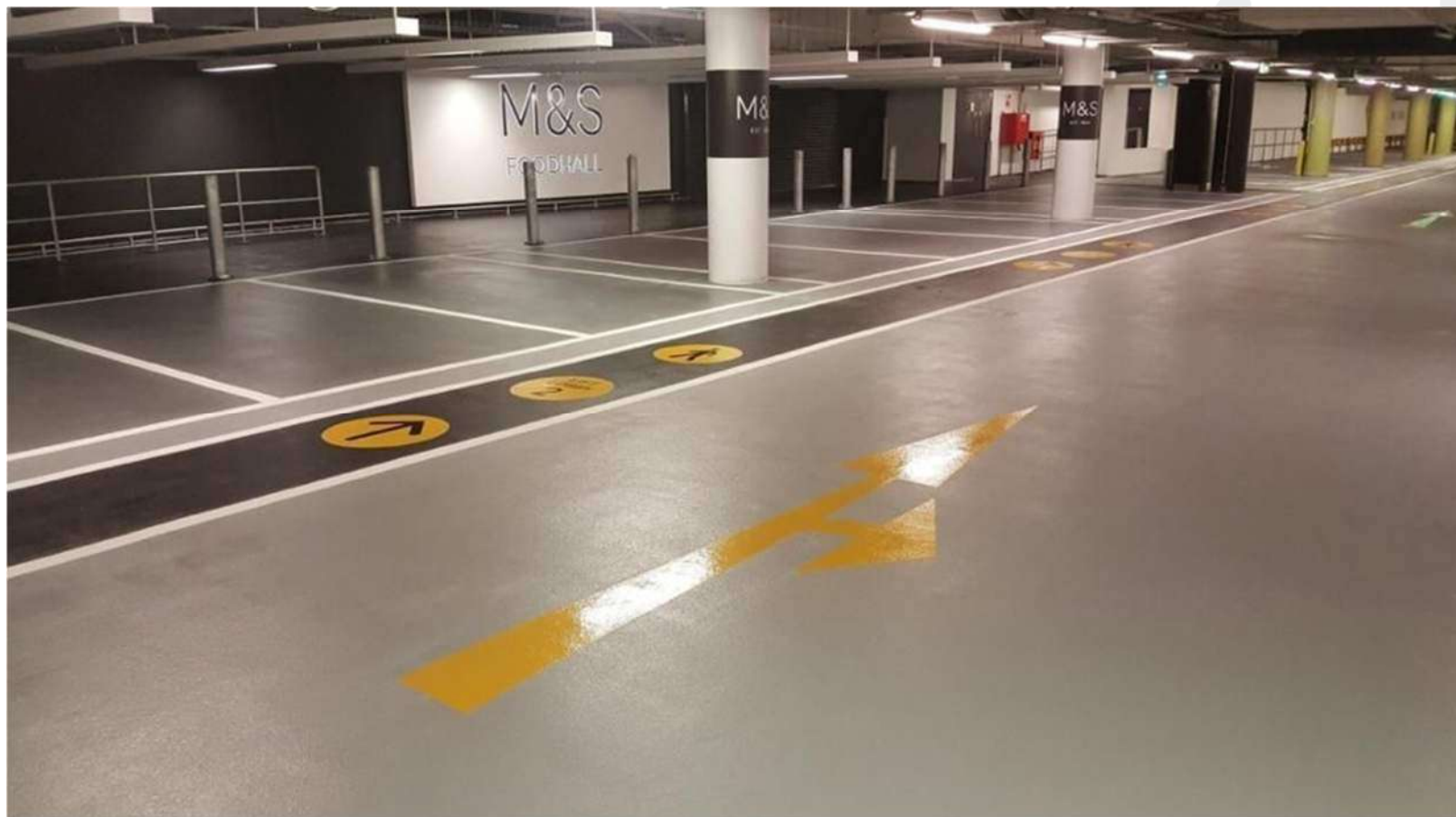
waterproofing works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Insulator works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

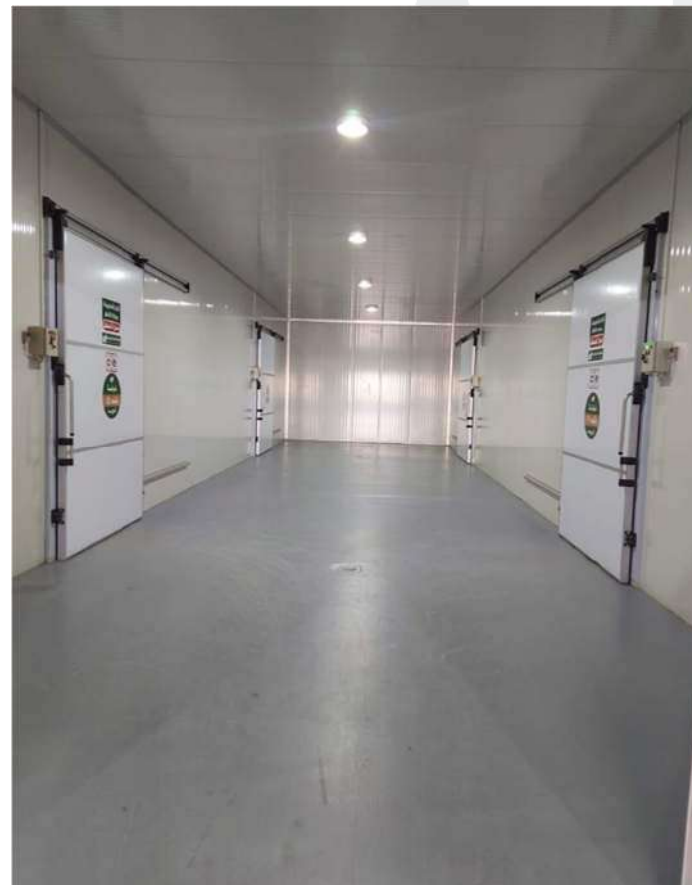
Insulator works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

waterproofing works





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Lufthansa International Limited

waterproofing works





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waterproofing works





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waterproofing works





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Lufthansa International Limited

waterproofing works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SPECIALIZED IN LANDSCAPE WORKS

100





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

LANDSCAPE WORK

we have company specialties in landscape work. Our expertise includes stonework, patios, water scaping (ponds, fountains, and waterfalls), retaining walls, fencing, garden structures, and plantings.

We specialize in Stonework :

- retaining walls (dry and mortared)
- cyclopean walls, using all types of stone
- Herb and vegetable gardens
- Kitchen gardens
- Brickwork
- walls, patios, walkways, driveways, steps, Walkways and patios



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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





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LANDSCAPE WORK





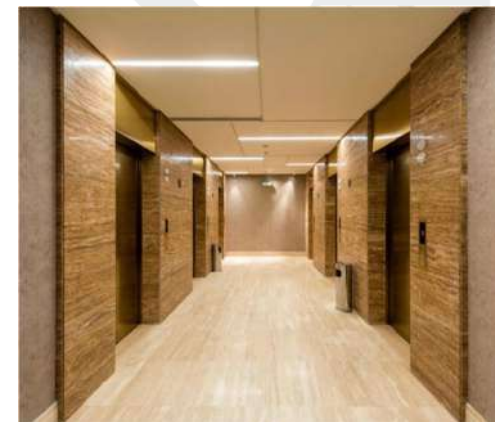
لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SPECIALIZED IN MARBLE WORKS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Marble works





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Marble works





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Marble works





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Lufthansa International Limited

Marble works





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Lufthansa International Limited

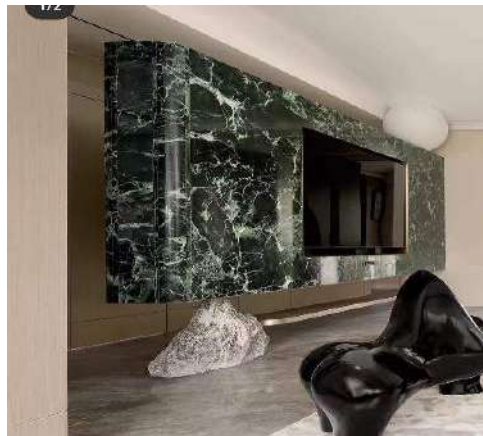
Marble works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

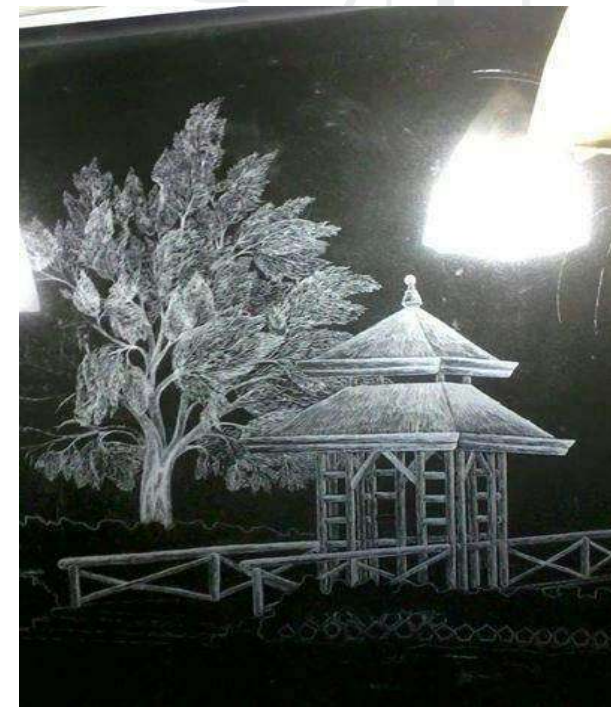
Marble works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Marble hand-carving works





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Lufthansa International Limited

Marble hand-carving works





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SPECIALIZED IN WOOD WORKING

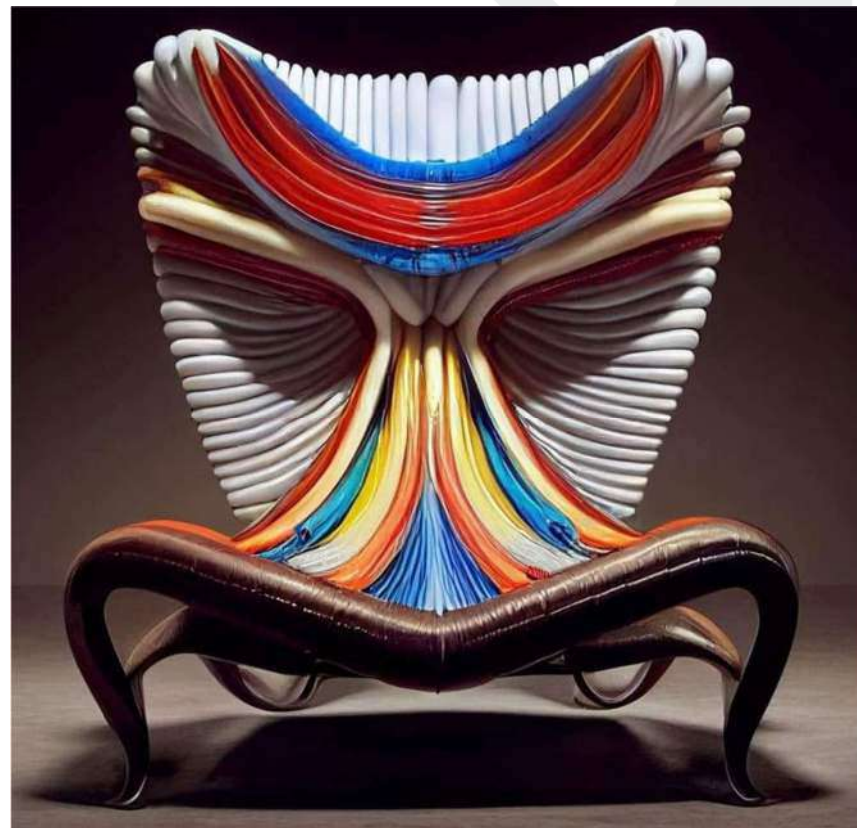
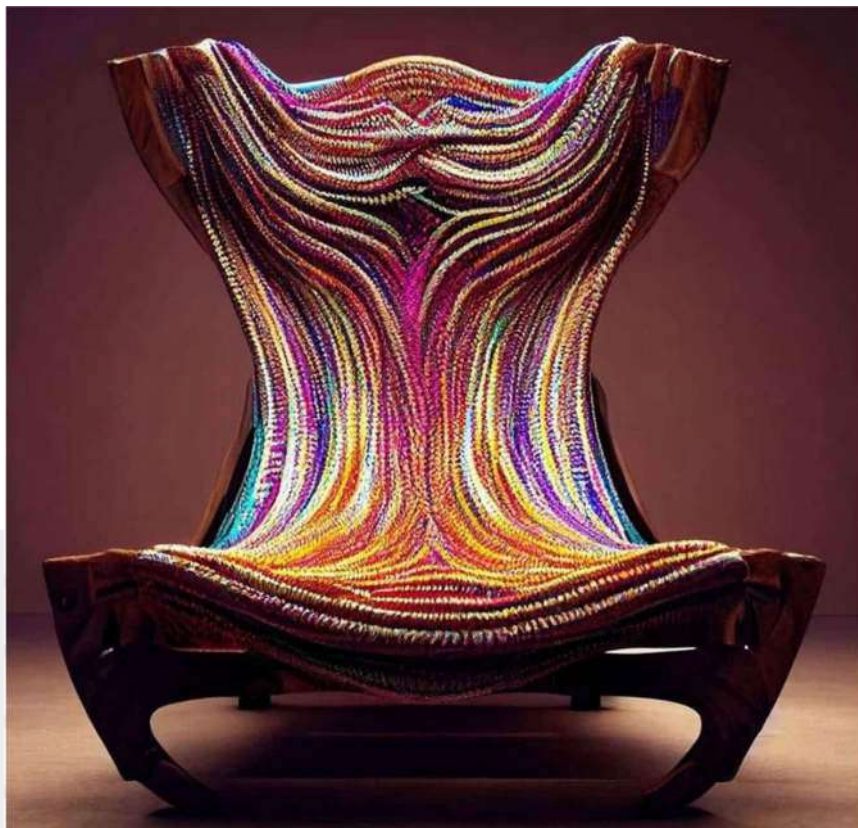
121





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

DOCERATION WOOD WORKING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

DOCERATION WOOD WORKING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

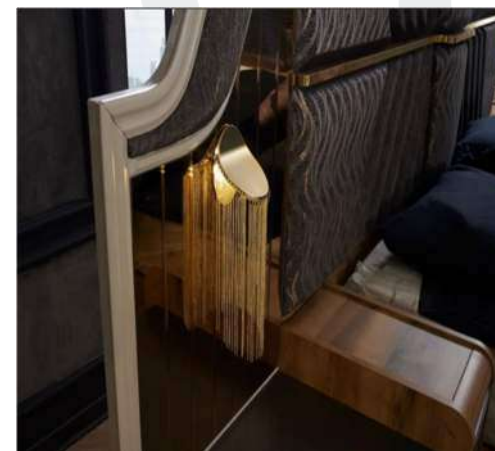
DOCERATION WOOD WORKING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

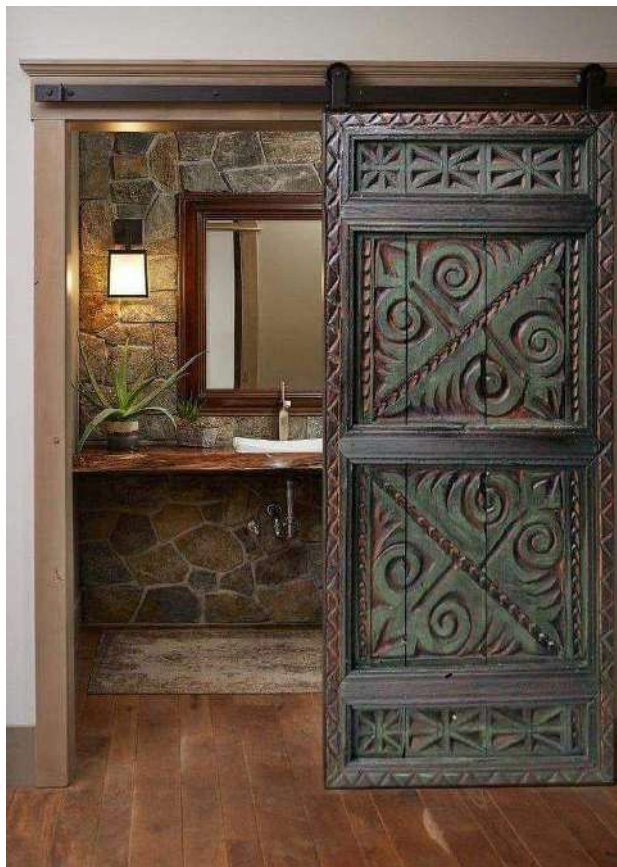
DOCERATION WOOD WORKING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

DOOR WORKING





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

DOOR WORKING





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DOOR WORKING





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Lufthansa International Limited

DOOR WORKING





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Lufthansa International Limited

DOOR WORKING





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Lufthansa International Limited



SPECIALIZED IN FINISHING WORKS





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Lufthansa International Limited

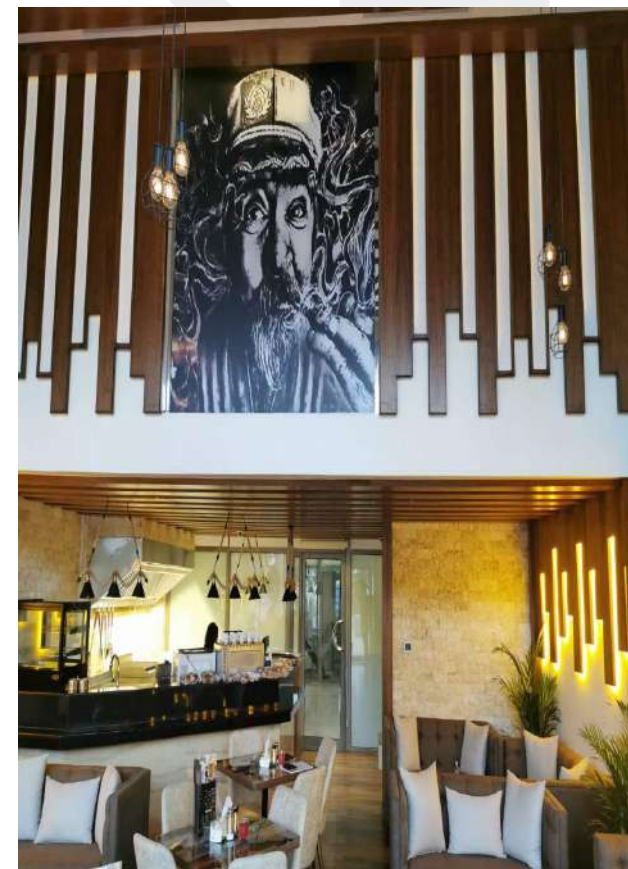
DOCERATION WOOD WORKING





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Lufthansa International Limited

DOCERATION WOOD WORKING





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DOCERATION WOOD WORKING





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FINISHING WORKS





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FINISHING WORKS





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FINISHING WORKS





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

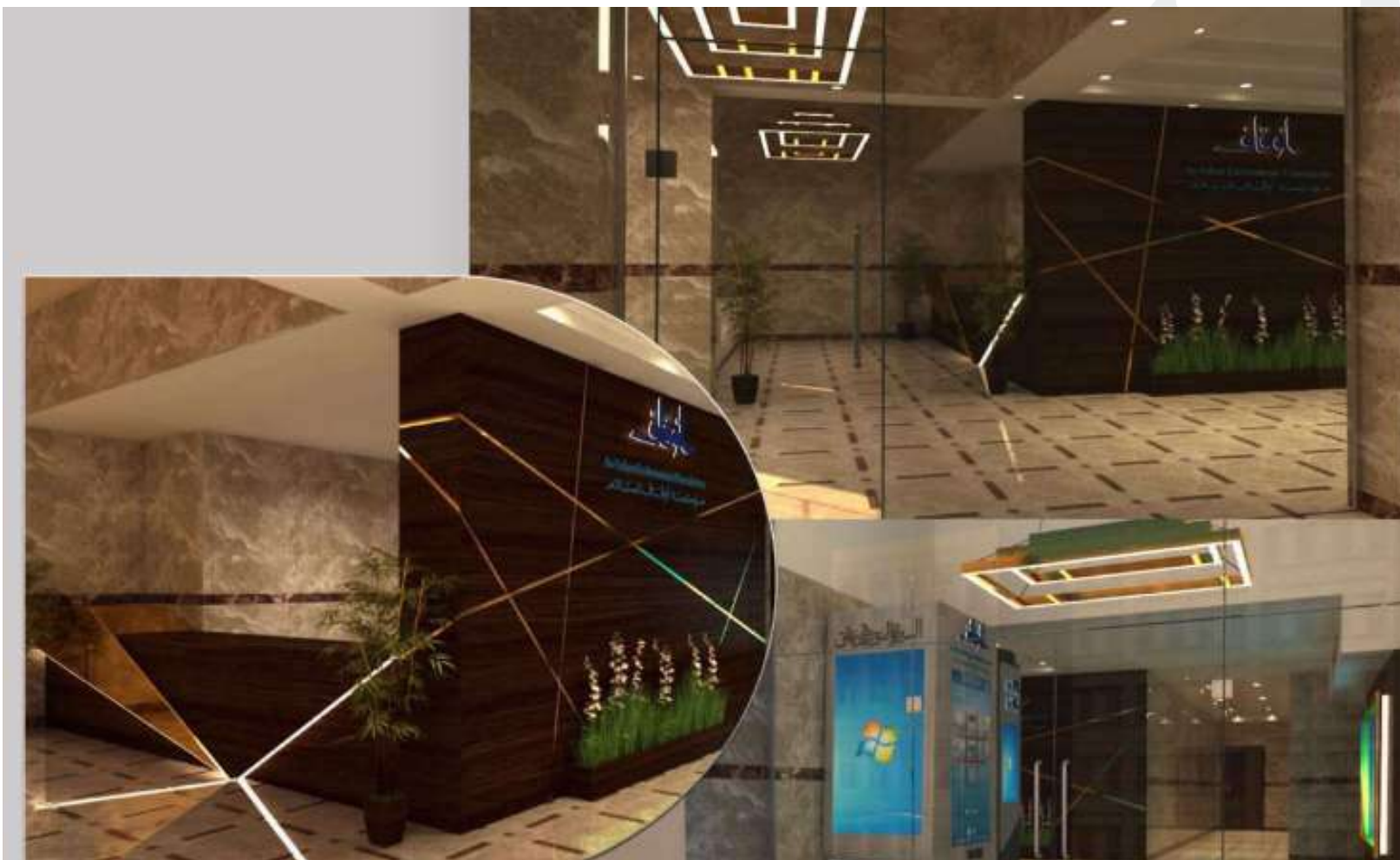
FINISHING WORKS





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Lufthansa International Limited

FINISHING WORKS





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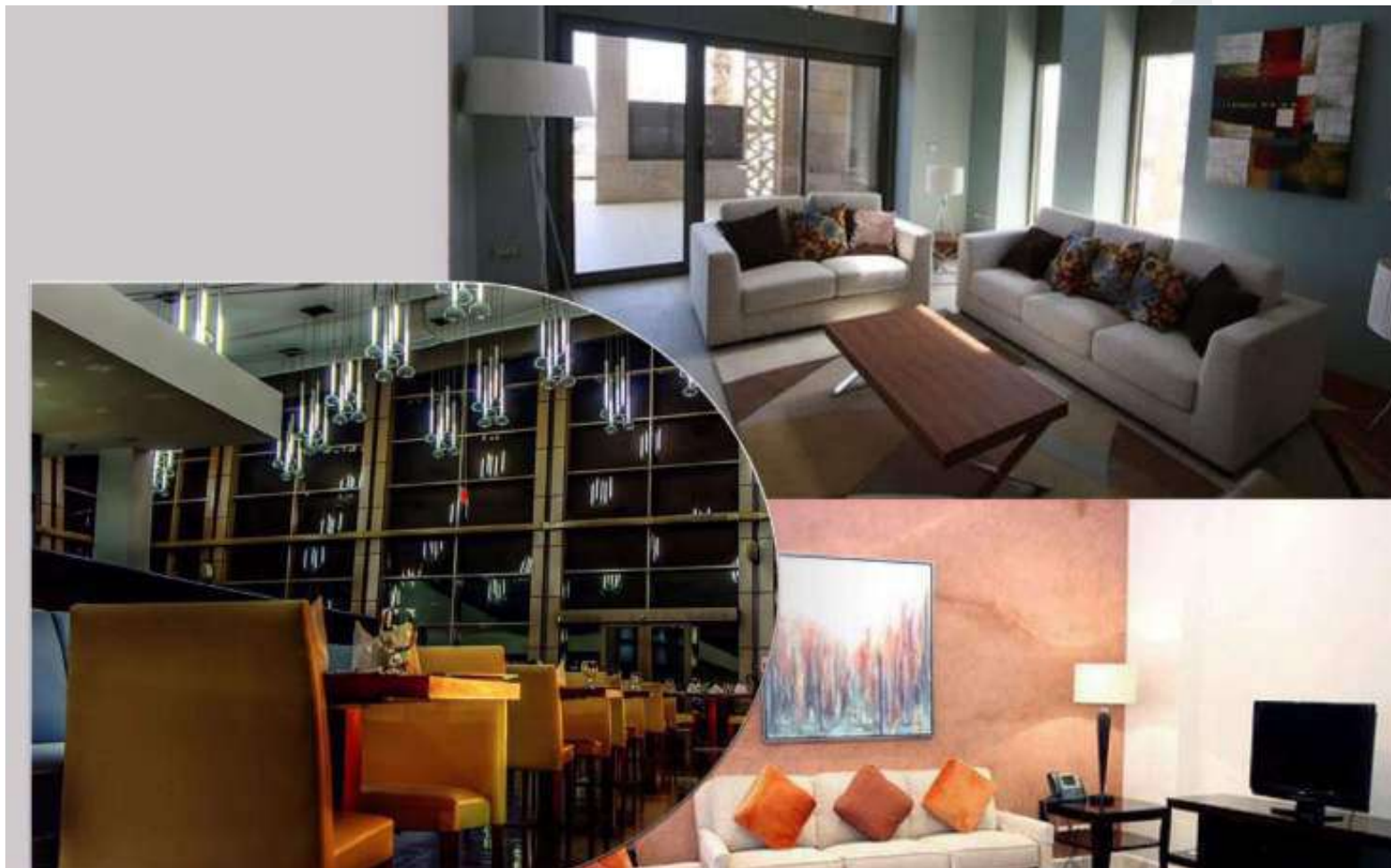
FINISHING WORKS





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FINISHING WORKS





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FINISHING WORKS





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AISH ACADEMY FOR TEACHING THE ART OF COOKING



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Lufthansa International Limited

AISH ACADEMY





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AISH ACADEMY





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AISH ACADEMY





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AISH ACADEMY





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AISH ACADEMY



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THE ISLAMIC

MUSEUM IN MECCA



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Lufthansa International Limited

ISLAMIC MUSEUM





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ISLAMIC MUSEUM





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ISLAMIC MUSEUM





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ISLAMIC MUSEUM



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ISLAMIC MUSEUM





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EDSAS TOWER



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Lufthansa International Limited

Edsas Tower Interior Design





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The Interior Design





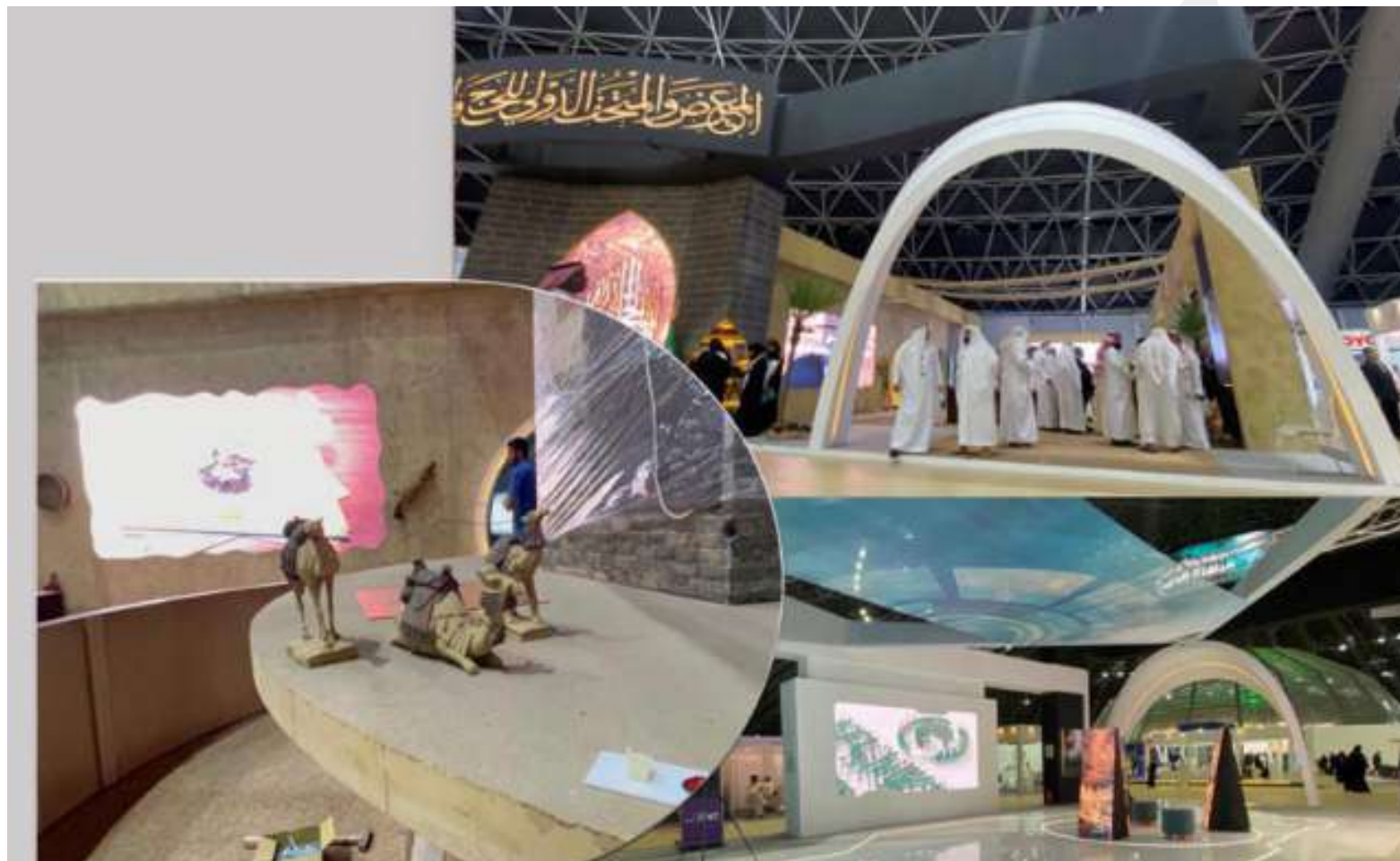
لوفتهانزا العالمية المحدودة
Lufthansa International Limited

INTERNATIONAL EXHIBITION OF HAJJ AND UMRAH IN JEDDAH (SUPER DOME)



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

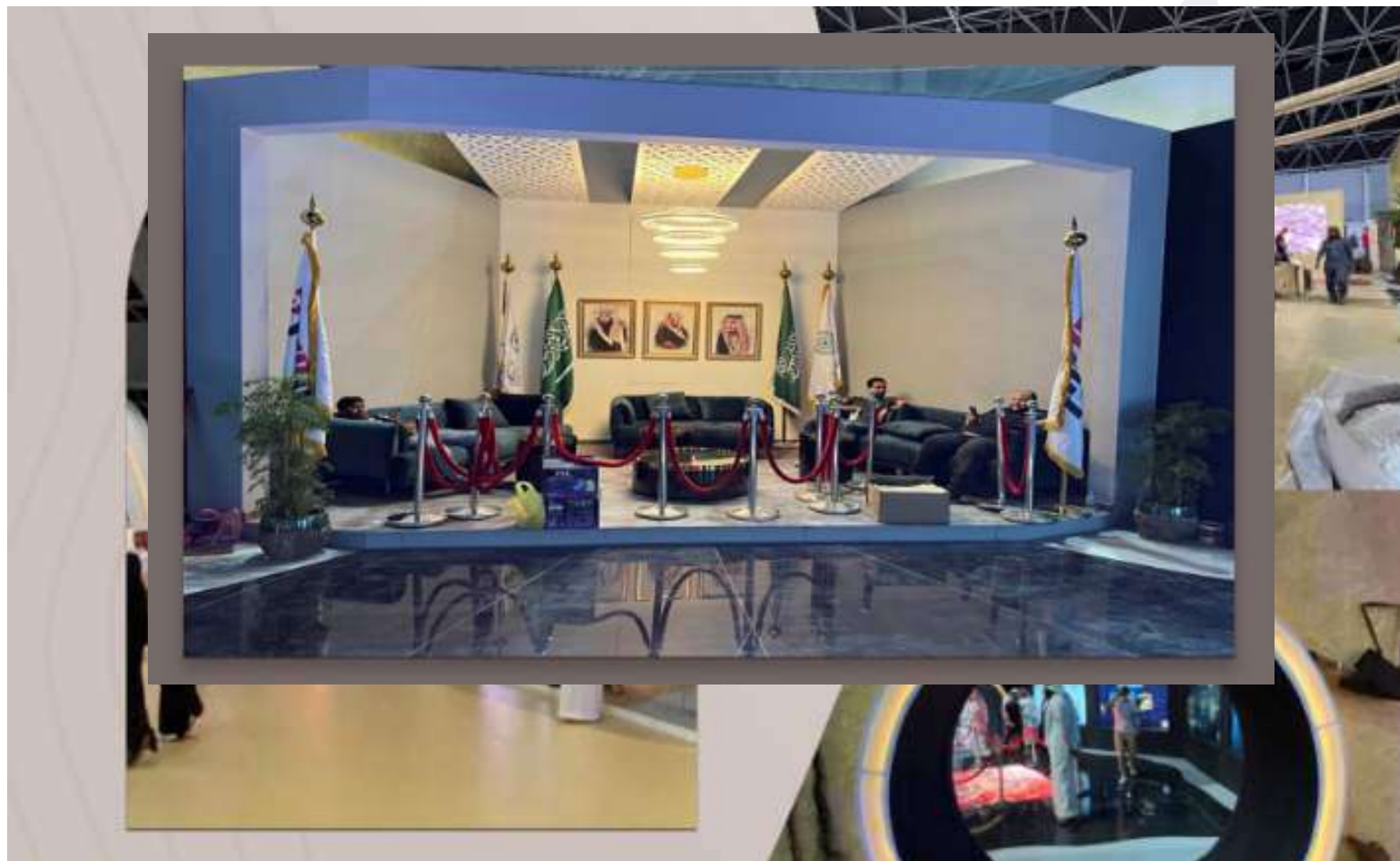
super dome





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super dome





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super dome





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super dome





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Lufthansa International Limited

THE INTERNATIONAL FAIR AND MUSEUM OF THE PROPHET'S BIOGRAPHY AND ISLAMIC CIVILIZATION



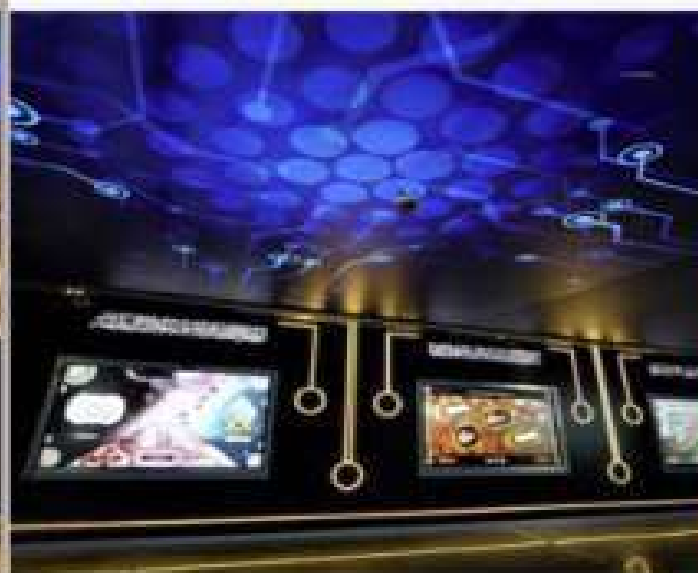
لوفتهانزا العالمية المحدودة
Lufthansa International Limited

The Interior Design





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Lufthansa International Limited



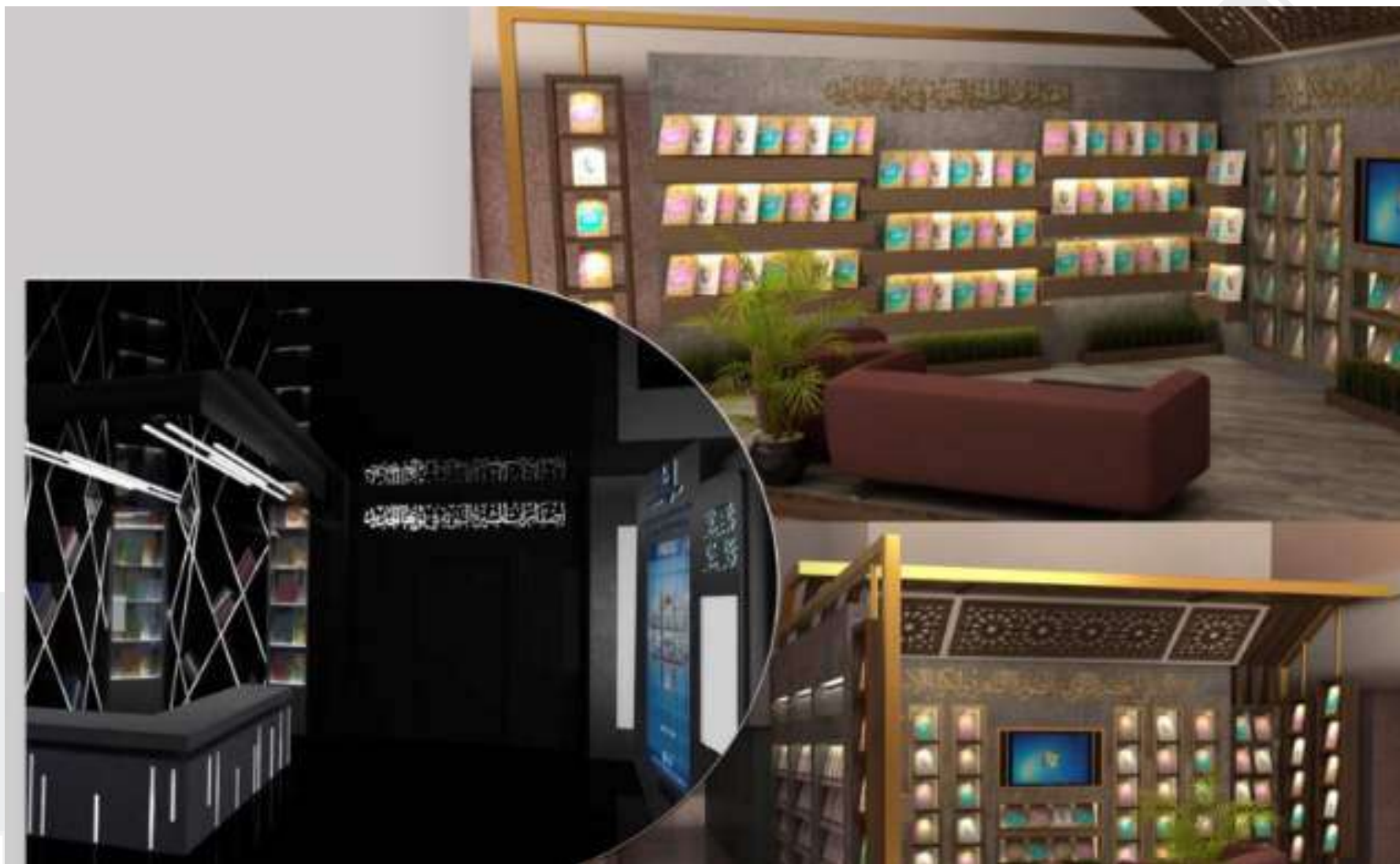


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Lufthansa International Limited





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لوفتهانزا العالمية المحدودة
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The Interior Design



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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

PROJECT INFO

PROJECT NAME

Movenpick Hotel & Residences
Hajar Tower Makkah

OWNER

MOVENPICK

LOCATION

MAKKAH, Saudi Arabia

CONTRACTOR

LUFTHANSA INTERNATIONAL
CONSTRUCTION CO.



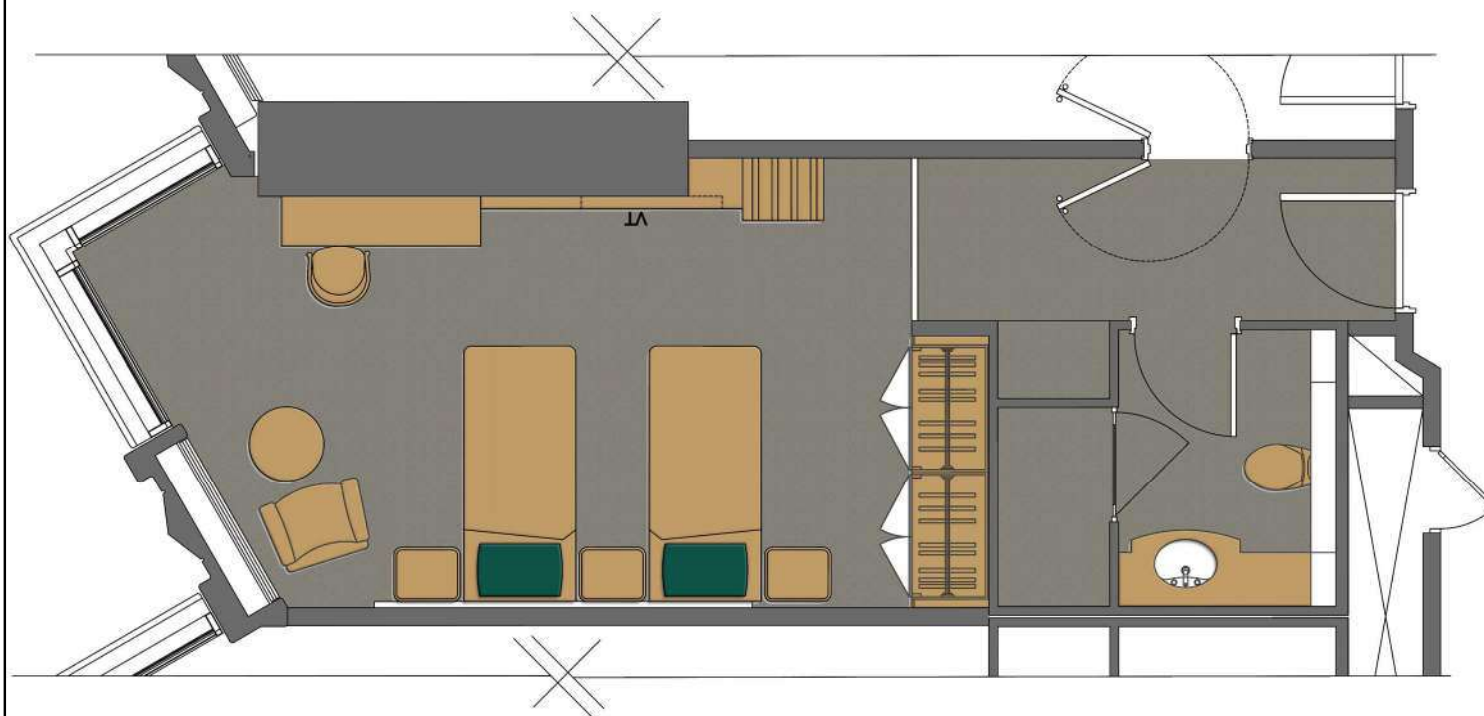


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Lufthansa International Limited

ROOM DESIGN



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Lufthansa International Limited





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MOOD BOARD



لوفتهانزا العالمية للمقاولات
Lufthansa International Limited



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Lufthansa International Limited

Color Scheme





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Materials



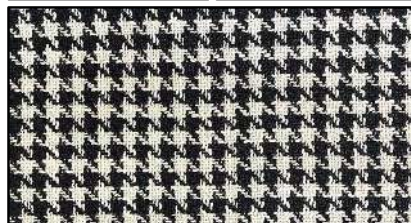
Carpet



Marble tiles
(floor)



Wall paint



Fabric



Wood
cladding

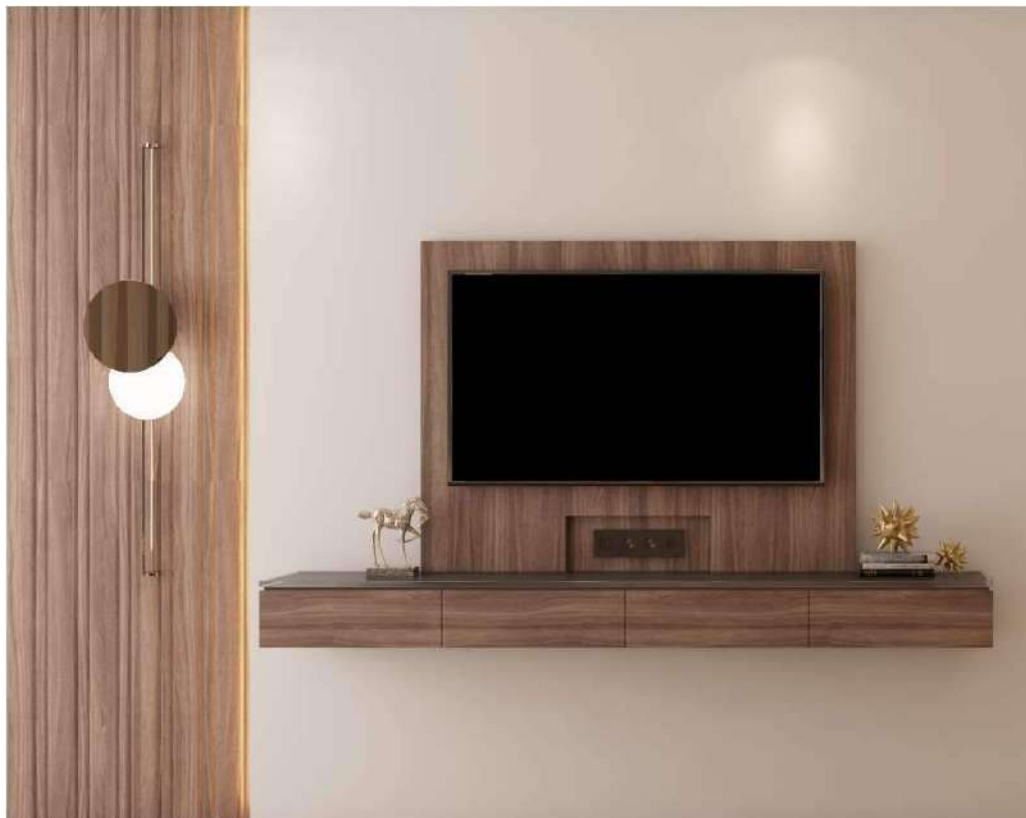


Marble tiles
(wall)



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Finishes



TV Cabinet



Door finishes



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Furniture



Arm chair



Chair



90 cm bed



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Furniture



Coffee corner



Coffee table



Comdina



Wardrobe



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Accessories



Curtain



Artwork



Sculpture



Vase



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Lights



Wall lights



Spot lights



Sockets



Pendant lights



لوفتهانزا العالمية المحدودة
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Bath



Towel roll



Washing cabinet



Marble seat



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Bath



Movable seat



Glass partition



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INTERIOR DESIGN



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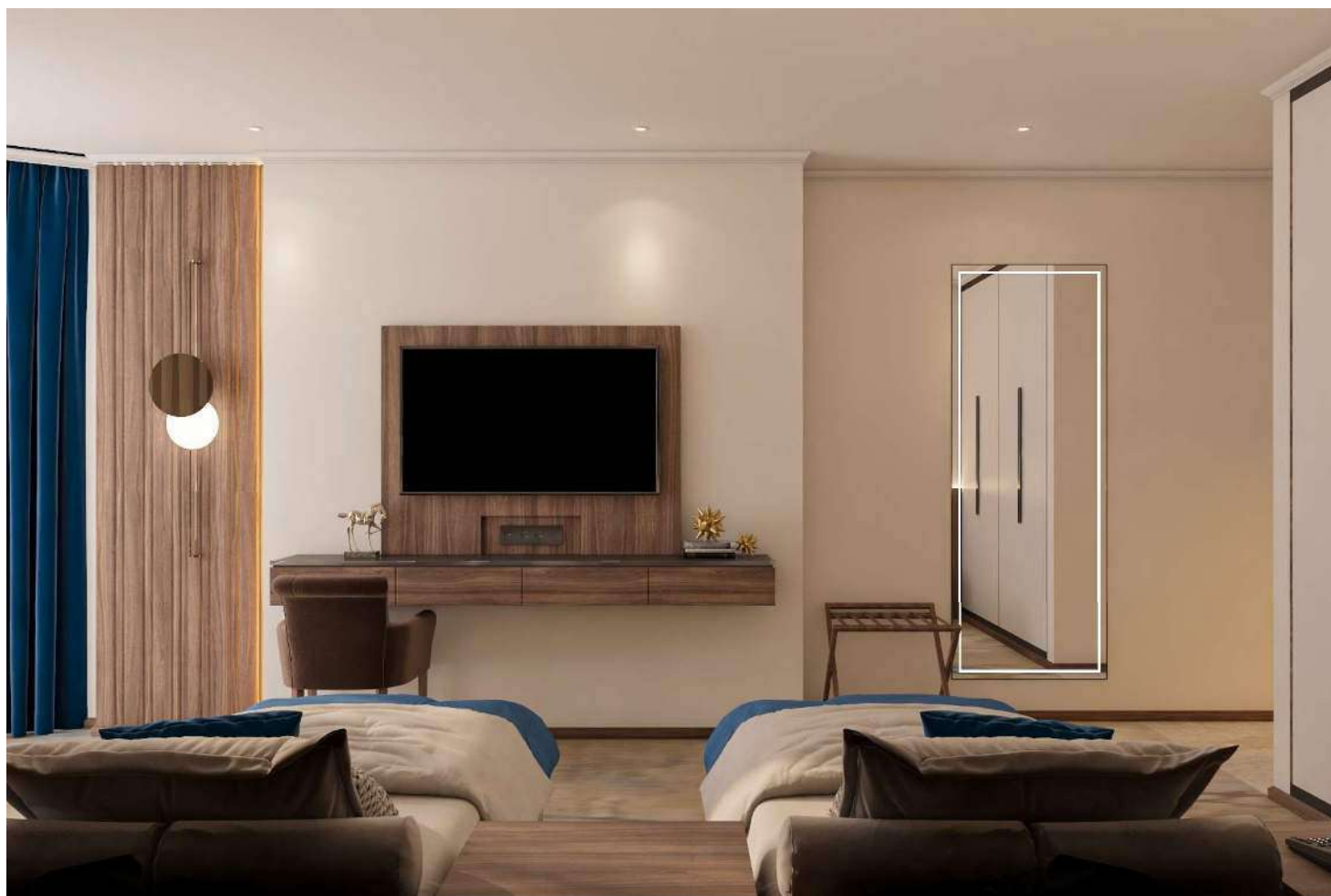


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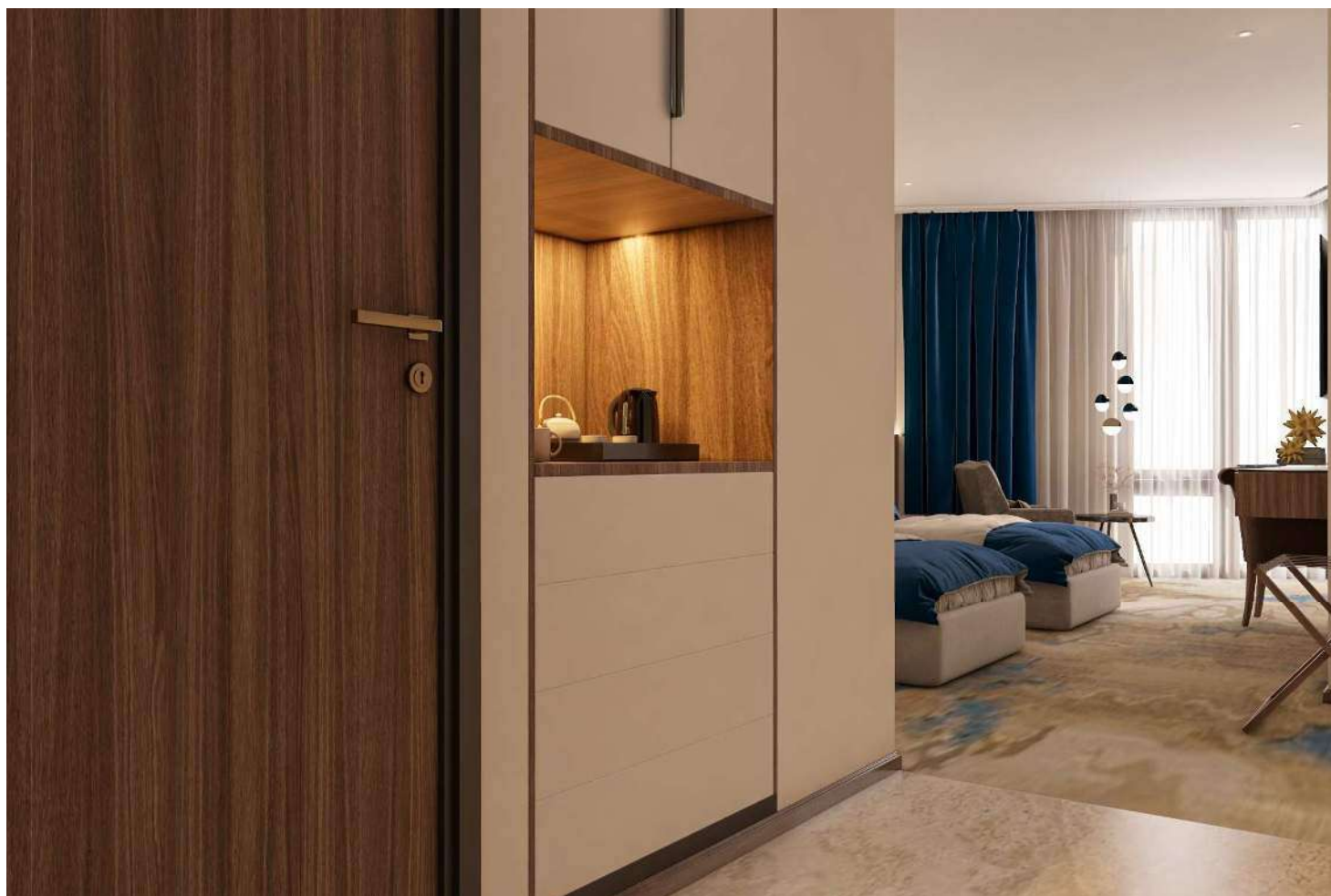


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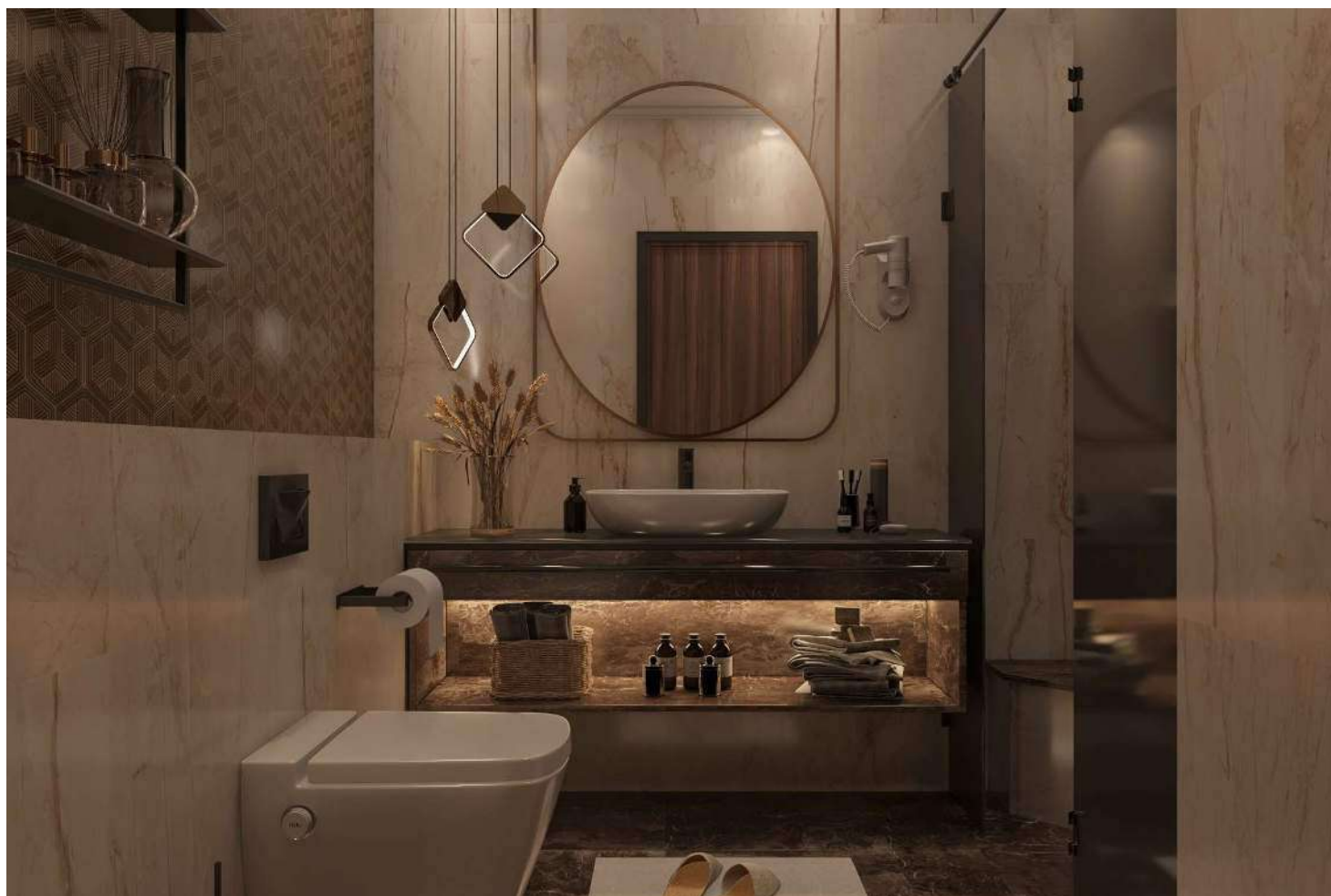


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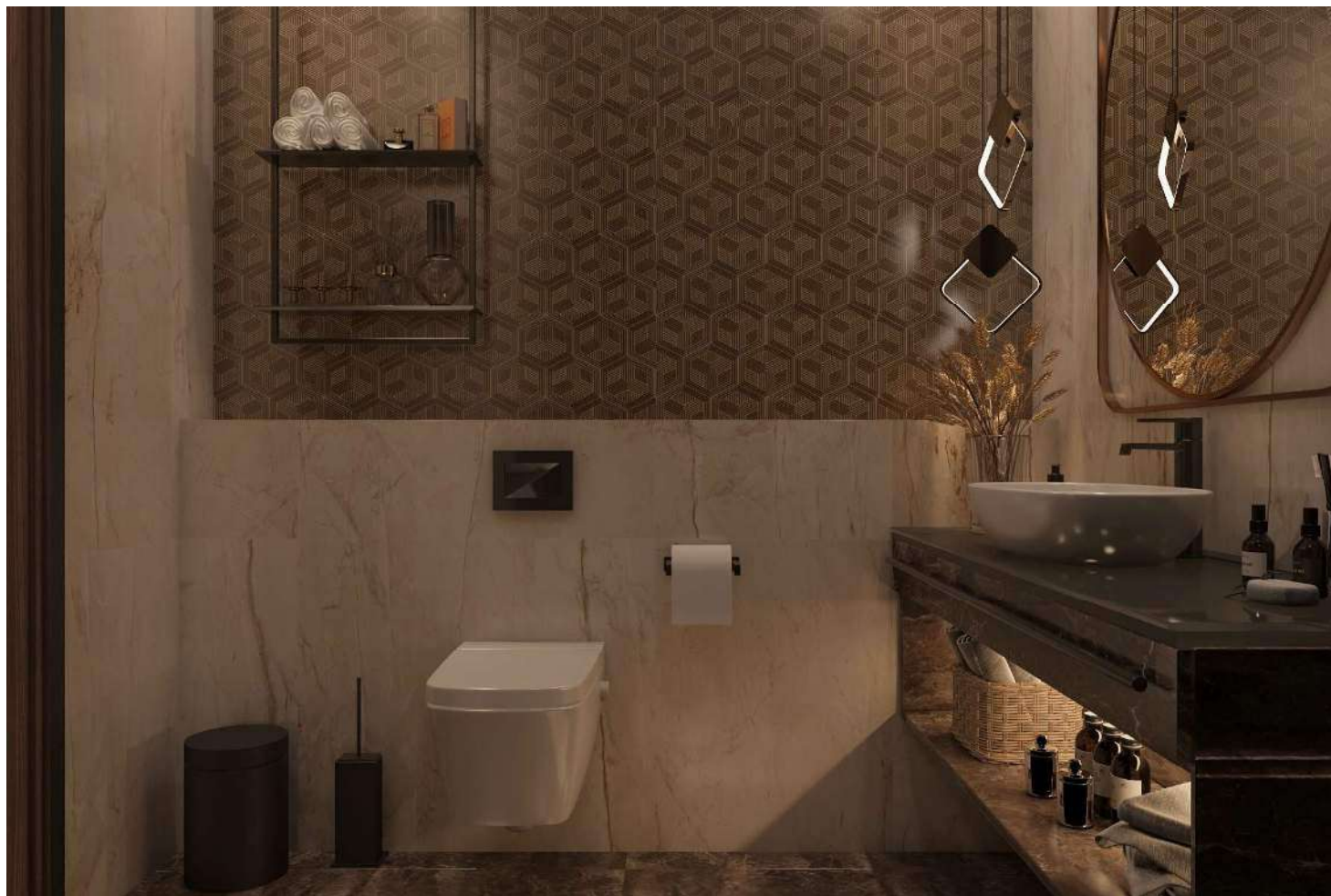


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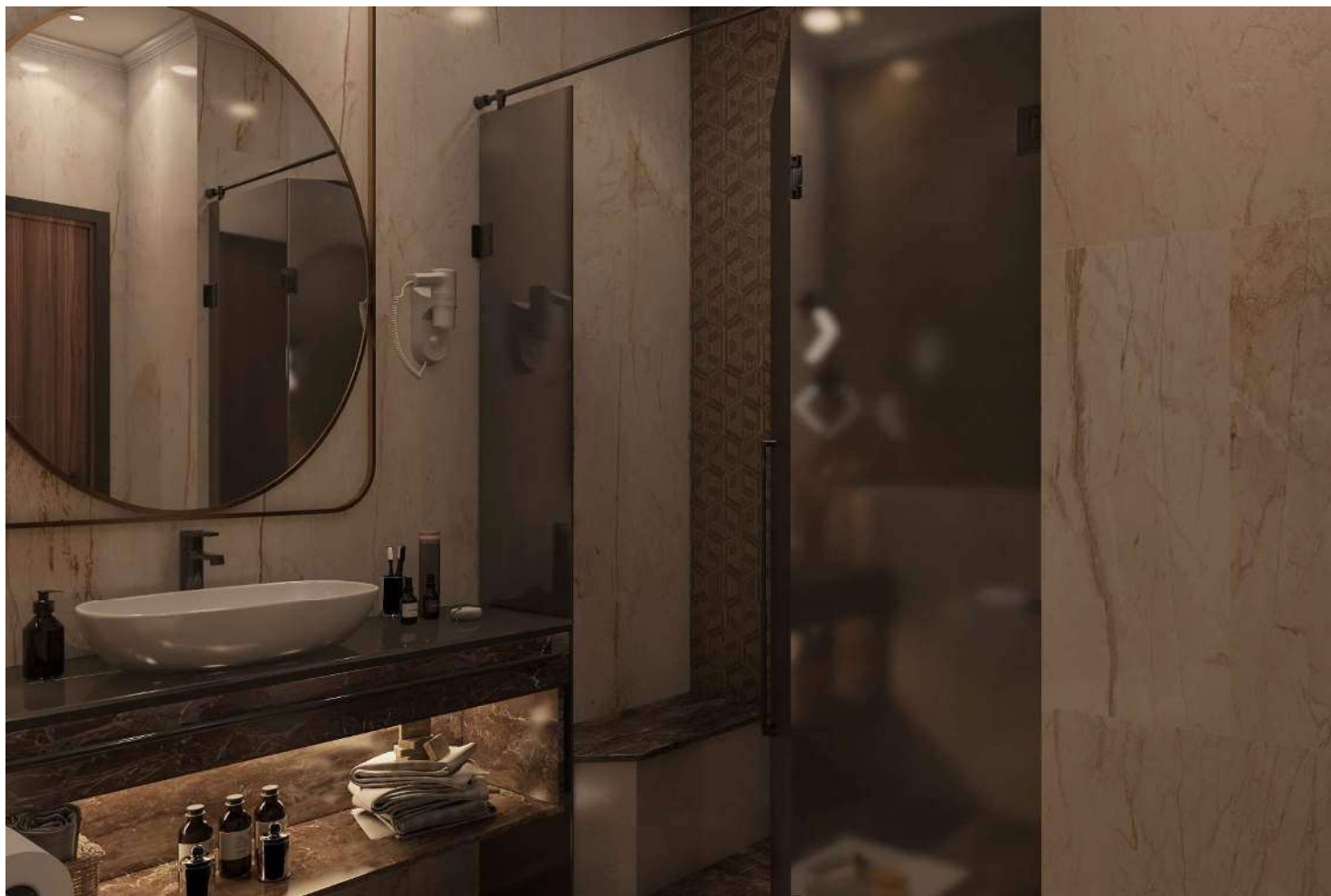


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QUOTATION



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

LUFTHANSA INTERNATIONAL CONSTRUCTION CO.

Quotation

Street Address: Altahlia Street
KSA- Jeddah, Bader Altahlia Building 08
Phone: +966 54 677 6730
Telefax: +966 12 261 3163

DATE
Quotation

04/9/2023
Ref# L.H-000064R1

Quotation To: **Eng. Shafeek Raufi**
Company Name: **MÖVENPICK hotel & residences**
Project Name: **MÖVENPICK renovation mockup**

Quotation value (SAR): **67,784**

Attention: Eng. Shafeek Raufi

Including VAT 15%

شكرا لكم على اختياركم لنا وننتشرف بإعطائكم لمحة عن شركتنا:

قادت شركة **Lufthansa** (مقاولات عامة للمباني وتطويرها) العديد من الأنشطة المتعلقة في الإنشاءات والمشاريع، وأداء العمل في مجال البناء العام. الصناعية والهندسية وقسم خاص للمشاريع الطبية المتخصصة وتصنيع وتوريد الخدمات المساعدة والمساندة وهي أحد الوكلاء المعتمدين لمنظمة ال إريكا البريطانية العالمية للجودة (ISO 9001 – 14001–45001).

لدينا عدة مصانع متخصصة بمواصفات ومعايير مطابقة للسوق السعودي، والتي تنتج الخشب، والألمنيوم (توريد وتركيب الابواب الخشبية والحديدية)، ومصنع مفروشات (أثاث مكتبي ومنزلي)، وقاعدة مجهزة تجهيزا جيدا من المعدات الثقيلة، مهندسين متخصصين في مجال الإلكترونيات وميكانيكا.

توظف الشركة حاليا فريق من الكوادر الهندسية جنبا إلى جنب، وتعمل الشركة في مجال التطوير العقاري حيث أنها تملك عدة مباني تجاريه ومكتبية.

Thank you for choosing us, and we are honored to give you an overview of our company:

Lufthansa (General Contracting for Building Development) has led various activities related to construction and projects, and performance of work in the general construction field. Industrial, Engineering and medical also specialized department for hospital solutions, Manufacturing and Supplying Auxiliary and Supporting Services, she is one of the authorized agents of the British IRCA International Organization for Quality (9001 – 45001–14001).

We have several factories specialized in specifications and standards conforming to the Saudi market, which produce wood, aluminum, and a furniture factory (office and home furniture), and a well-equipped base of heavy equipment of more than 100 and more, also we have installing and applying steel and wooden doors, we also have engineers specialized in electromechanical.

The company currently has employees, including an engineering team side by side. The company works in the field of real estate development, as it owns several commercial and office buildings.

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Mobile: +966546776730
Email: info@lufthansa-int.com

United Kingdom:
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(We have the honor to present a quote to your Excellency as we are pleased to serve you, and this is based on the highest standards, the following is the price offer with its details and we hope that it will obtain your satisfaction and approval)

#	Description	unit	unit price	Qty.	Sub Total
A. Preperation Work					
a1.	Demolition of Toilet, Removing Floor in Guest Room	L/S	1500	1	1,500
a2.	Saftey Plane to Remove ALL Stuff Inside Room	L/S	500	1	500
B. Guest Room					
Civil Work					
b1.	Supply & Install New Marble (Grem Marble) With New Back Fill, Also Installed By Zero Joint -Turkish	M2	175	26	4,550
b2.	Supply & Install Scarting "PVC type" With Finishing Marble	L.M	25	27	675
b3.	Supply & Install Marble Scarting Under Window	L.M	40	5	200
b4.	Supply & Install Carpet	M2	115	26	2,990
b5.	Supply & Apply Painting for Wall and Repair Any Cracks	M2	25	80	2,000
b6.	Supply & Apply Painting for Ceiling and Repair Any Cracks	M2	30	35	1,050
C. WoodWork					
c1.	Refurbishment Doors, Changing Hanges, Door Closing Stopper, Magic Eye Door, Drop Seal.	no.	900	2	1,800
c2.	Supply & Install New Headboard	M2	585	8	4,680
c4.	Supply & Install New Clading "Natural Wood" type for TV Screen "TV not Included"	L.S	3500	1	3,500

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D. Furniture					
d1.	Refurbishment or Supply New -1 Coffee Corner -1 Set of Drawer -2 Comdinas -1 Coffee Table With new Tempered Glass -1 Desk + Chair Under Mirror - 1 Arm Chair	Set	3000	1	3,000
d2.	Refurbishment Wardrobe with Polish and change any Damage	L.S	1500	1	1,500
d3.	Supply & Install New Bed 90 cm wide	no.	1200	2	2,400
E. Devices					
e1.	Supply & Install New Min Bar	no.	900	1	900
e2.	Supply & Install New Safe Box	no.	250	1	250
e3.	Supply & Install New Art Works.	no.	160	2	320
e4.	Supply & Install New Curtain (Sheer Curtain and Heavy Curtain with Blackout)	L.M	410	5	2,050
F. Electromechanical Work					
f1.	Supply & install New Grill For Supply & Return	no.	600	2	1,200
f2.	Supply & Install New Thermostat 'Siemense' Type	no.	700	1	700
f3.	Supply & Install New Spot Light	L.S	1200	1	1,200
f4.	Supply & Install New Fitting Light For Two Beds. (Reading Spot With Self Switch, Touch Table Lamp, Floor Lamp With Self Switch	L.S	1000	1	1,000
f5.	Supply & Install New wiring Device 'Legrand' Mosaic for: - 6 Switches - 8 Sockets (Double+USB) - 6 Data - 1 Sound Switch	L.S	2400	1	2,400

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G. Toilet					
f6.	Supply & Install Duroplast aquare shower seat	no.	850	1	850
g1.	Supply & Install Marble Tiling For Floor With New Back Filling And Water Insulation Layer - Turkish	M2	175	8	1,400
g2.	Supply & Install Marble For Walls With Zero Joint	M2	175	25	4,375
g3.	Supply & Install Shelves from Marble	L.S	750	1	750
g4.	Supply & Install Tampered Glass Partition For Shower Corner.	M2	150	3	450
g5.	Supply & Apply New Paint With and Repairing Cracks.	M2	40	8	320
g6.	Supply & Install New Access Door from GRC Material	M2	110	2	220
g7.	Door Refurbishment by Changing New Hange.	no.	1100	1	1,100
2- Electromechanical Work					
g8.	Supply & Install New Wiring Device	L.S	1800	1	1,800
g9.	Supply & Install New Spot	L.S	2750	1	2,750
g10.	Supply & Install Ceiling Exhaust Fans	no.	700	1	700
g11.	Supply & Install New Flush Tank 'grohe'	no.	2500	1	2,500
g12.	Supply & Install New Hanging Bath Chair 'grohe'	no.	1800	1	1,800
g13.	Supply & Install New Hand Sink With Marble Finish and All Accessories and Fittings	no.	800	1	800
g14.	Supply & Install Concealed Shower For Shower Corner	no.	900	1	900
Total					61,080
Special discount					2,137
VAT(%15)					8,841
Grand Total					67,784

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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Payment Terms & Conditions:

50% Advance payment

40% Progressive payment

10% Handover

The company's official bank account:

Bank	Saudi National Bank
Account Name	LUFTHANSA INTERNATIONAL CONSTRUCTION CO
Account Number IBAN	SA9310000013200000499610

We hope that this offer reaches your satisfaction at this stage, await your favorable reply. Should you need any further queries, please do not hesitate to contact the undersigned

Projects Manager

Eng. Mohammed Yousef



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DATASHEETS

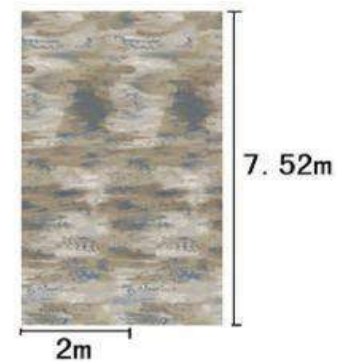


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Carpet



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Series : FX X	Type : Nylon Printed Carpet	Pile height: 7MM	Pile weight: 1000g
Area :	Yarn Content : 100% Nylon	Signature :	
Pattern : R11348FU/H102B			



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CARPET SPECIFICATIONS & TESTS

FIRE TESTS & AIR QUALITY TEST



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



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Fax: +44 (0)113 278 0308
Web: <http://www.bttg.co.uk/bctc>
Email: CSLeeds@bttg.co.uk

Our Ref: 26/00951/09/09
Your Ref:
Order No:

29 September 2009
Page 1 of 7

Client: Haima Group Corp
No 329 Qingdao South Road
Weihai
Shandong
g China

Job Title: **Fire Test**

Material Received: 11 September 2009

Description of Sample: One sample of carpet referenced, **Haima Printed Carpet 100% Nylon.**

Brief: BCTC were requested to carry out a fire test on the sample supplied according to CE Marking.

UKAS Accreditation: Our laboratories are UKAS accredited. However, it should be noted that tests marked * are not UKAS accredited in this report. They are not included in the UKAS Accreditation Schedule for our laboratory, either due to the work not conforming fully to the standard (e.g. reduced number of specimens) or to it being outside the scope of our accreditation, or subcontracted.

Uncertainty: An estimation of uncertainty of measurement has not been taken into account when making a judgement to any pass/fail criteria.

Testing Atmosphere: Unless otherwise specified the sample has been conditioned and tested, where appropriate, in the standard atmosphere for conditioning and testing textiles (BS EN ISO 139:2005) of 65±4% r.h. and 20±2°C.



BCTC is a business centre of BTTG Testing & Certification Ltd.
Unit 14, Wheel Forge Way, Ashburton Road West, Trafford Park, Manchester M17 1EH, Company No. 04669650
The supply of all goods and services is subject to our conditions of sale, copies of which are available from our web site - http://www.bttg.co.uk/pdf/Terms_Conditions.pdf



Date: 29 September 2009
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Haima Group Corp

**FIRE TESTS ACCORDING TO BS EN ISO 11925-2:2002
Reaction to fire tests for building products – Part 2:
Ignitability when subjected to direct impingement of flame**

Date of Test: 28/09/09

Conditioning

Test specimens and filter paper conditioned as described in BS EN 13238:2001.

Procedure

The sample was tested in accordance with BS EN ISO 11925-2:2002.

Three specimens from each direction were tested in accordance with the above standard. Specified filter paper was placed beneath the specimen holder and replaced between tests.

The specimens were mounted vertically in the specimen holder so that one end and both sides were enclosed with the exposed end 30mm from the end of the frame. The burner was inclined at an angle of 45°. The flame height was set at 20 mm with the flame impinging on the specimen for 15 seconds on the centre line, 40 mm above the bottom edge.

A marker was placed 150 mm above the upper end of the burner and the time recorded when the flame tip reached the marker, if applicable. The following parameters were also recorded:-

1. If ignition occurs
2. Presence of flaming debris, if applicable
3. Ignition of the filter paper, if applicable

Duration of test

For a flame application time of 15 seconds, the total test duration is 20 seconds after application of the flame.



This report is incomplete without all the pages specified above.



Date: 29 September 2009
Our Ref: 26/00951/09/09
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Halma Group Corp

Classification Criteria

The samples were classified according to BS EN 13501-1:2002 Fire classification of Construction Products and Building Elements: Part 1 - Classification using Test Data from Reaction to Fire Tests, Table 1 - Classes of reaction to fire performance for construction products excluding floorings.

Flaming Classification	
Classification	Criteria (mean values)
Er L FrL	$F_s \leq 150\text{mm}$ within 20 seconds None (No performance determined)
Flaming droplets / particles classification	
Classification	Criteria
No classification d2	Pass Fail (Ignition of paper)

Results

	Ignition (Yes or No)	Time of flaming if ignition occurs (s)	Tip of flame reaches 150mm. Yes or No	Flaming droplets Ignition of Filter paper (Yes or No)	Classification
Warp 1	No	N/A	No	N/A	Er
Warp 2	No	N/A	No	N/A	Er
Warp 3	No	N/A	No	N/A	Er
Weft 1	No	N/A	No	N/A	Er
Weft 2	No	N/A	No	N/A	Er
Weft 3	No	N/A	No	N/A	Er



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Halma Group Corp

FIRE TESTS ACCORDING TO BS EN ISO 9239-1:2002 Reaction to fire tests for Floorings - Part 1: Determination of the burning behaviour using a radiant heat source (ISO 9239-1:2002)

Date of Test: 28/09/09

Conditioning

The specimens were conditioned in accordance with BS EN 13238:2001. The substrate used was a fibre cement board (ISO 390) with a thickness of $(6 \pm 1)\text{mm}$ and a density of $(1,800 \pm 200)\text{ Kg/m}^3$ representing the standard substrate of Class A1fl or A2fl.

Procedure

The test was carried out in accordance with BS EN ISO 9239-1. The sponsor sampled and cut the specimens to the dimensions stated.

Specimens were individually placed in the combustion chamber and allowed to preheat for two minutes under a radiant panel, which gives an imposed radiant flux ranging from approximately 11.0 kW/m^2 to 1.0 kW/m^2 along the specimen.

The pilot flame used was the line burner as described and was applied to the surface of the specimen for 10 minutes and then removed.

The flame front was measured at the end of the test or at 30 minutes if applicable.

Test termination was considered to be when the flame front self extinguished or at 30 minutes, whichever is the sooner.

The heat flux from the panel incident on the specimen when self extinguished or at 30 minutes (critical heat flux CHF or HF-30) was calculated from a prior calibration.





Date: 29 September 2009
Our Ref: 26/00951/09/09
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Halma Group Corp

Classification Criteria

The samples were classified according to BS EN 13501-1:2002: Fire classification of Construction Products and Building Elements: Part 1: Classification using Test Data from Reaction to Fire Tests.

For floorings, including their surface coverings the classes are:

Classification	Classification Criteria (mean values) (kW/m ²)
B _{s1}	8.0
C _{s1}	4.5
D _{s1}	3.0
Smoke Production % x min	
s1	≤ 750
s2	Not s1

When tested to BS EN ISO 11925-2:2002 the sample has to have a flame spread (Fs) of: Fs ≤ 150mm within 20 seconds (Class EF).

Results

The test results relate to the behaviour of the test specimens of a material under the particular conditions of test; they are not intended to be the sole criterion for assessing the full potential fire hazard of the materials in use.



Date: 29 September 2009
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Halma Group Corp

Results (Continued)

Specimen No.	Direction of specimen	Smoke Obscuration		Maximum Flame front (mm)	Critical Heat Flux (kW/m ²)	Duration of Flaming (sec)
		Max %	% x min			
1	Machine	20	63	325	6.5	1510
2	Across	46	118	330	6.4	885
3	Across	51	179	395	5.1	1050
Mean of 3 specimens	Across	31	94	290	7.2	770
	Across	43	130	338	6.2	902

Distance Burnt (mm)	Time for each specimen to burn (s)			
	1	2	3	4
50	157	171	177	184
100	204	219	203	211
150	257	245	254	276
200	348	310	300	316
250	600	380	360	410
300	1040	600	450	-
350	-	-	572	-

Note

One specimen was initially tested in each direction and whichever direction gave the worst result a further two specimens were tested. Only the results of the 3 specimens in the same direction were used to calculate the mean results.

The specimens of floor covering were tested loose laid onto a 6mm fibre cement board as defined in BS EN 13238:2001.





Date: 29 September 2009
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Halma Group Corp

Comments

In our opinion, based on the tests carried out on the sample supplied;

- a) the results of the BS EN ISO 11925-2:2002 test indicate the sample meets the requirements of a Class E_n. It should be noted that this is only class that can be achieved when tested to this method alone.
- b) the results of the BS EN ISO 9239-1:2002 test indicate the sample meets the requirements of a Class C_n-s1 when tested to this method alone.

Conclusion

In our opinion, the results indicate that the sample when classified to BS EN 13501-1:2002 meets an overall classification of: **Class C_{s1}**.

The information contained on page no's 1/7 of this certificate is hereby certified to be a correct statement of the tests and investigations carried out by the British Carpet Technical Centre on the materials referred to.

Signed.....²³..... Date 30 September 2009
Mrs B Marsden
Fire Technician

Reported By..... Date 30 September 2009
P Doherty
Operational Head

This report is incomplete without all the pages specified above.





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Lufthansa International Limited



Confidential Report

Our Ref: 25/08732B/04/18



Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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TESTING • CERTIFICATION • AUDITING

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Email: info@bttg.co.uk
Website: www.bttg.co.uk

Date: 29 May 2018
Our Ref: 25/08732B/04/18
Your Ref:
Page: 1 of 4

Client: Weihai Haima Carpet Group Co., Ltd
Haima Industrial Park
Economic & Technology Development Zone
Weihai
Shandong
P.R. China

Job Title: Colour Fastness Tests on One Sample of Carpet

Client's Order No: ---

Date of Receipt: 16 April 2018

Description of Sample(s): One sample of carpet, reference; Nylon Printed Carpet

Work Requested: We were asked to make the following test(s):

BS EN ISO 105-B02- Light
BS EN ISO 105-E01-Water
BS EN ISO 105-E02- Sea Water
BS EN ISO 105-X12 - Rubbing
BS ISO 18168- Shampoo

Note: This report relates only to the samples submitted and as described in the report.

* subcontracted test, UKAS accredited
** subcontracted test, EN ISO/IEC 17025 accredited
*** not UKAS accredited



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Website: www.bttg.co.uk

Date: 29 May 2018
Our Ref: 25/08732B/04/18
Your Ref:
Page: 2 of 4

Client: Weihai Haima Carpet Group Co., Ltd

Colour Fastness to Light

The sample was exposed using the flip flop test mode on the Xenotest 150 fading lamp together with Blue Scale British Light Fastness Standards Nos. 2 - 6 (BS EN ISO 105-B02:2013 - Method 2 (ISO 105-B02:2013)). By comparison with the behaviour of the standards, the fastness to light of the sample may in our opinion be rated as follows:-
(8 represents maximum fastness and 1 minimum fastness).

Colour	Light Fastness Rating
Beige	6
Brown	5 (Redder)

Colour Fastness to Water

The sample was tested in accordance with BS EN ISO 105-E01:2013 (ISO 105-E01:2013); the test device was positioned in the oven so that the test specimen was in a horizontal position.

The change of colour of the specimen and the staining of the adjacent fabric, multifibre DW, was assessed using standard grey scales; 5 represents no change of colour or staining and 1 a severe change of colour or staining.

Change of Shade	Staining of SDC multifibre strip					
	SCA*	cotton	nylon	polyester	acrylic	wool
4-5	4-5	4-5	4-5	4-5	4-5	4-5

* SCA = Secondary Cellulose Acetate



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لوفتهانزا العالمية المحدودة
Lufthansa International Limited



TESTING • CERTIFICATION • AUDITING

Wira House, West Park Ring Road, Leeds, LS16 6DL, UK.
Telephone: +44 (0) 113 259 1999
Email: info@bttg.co.uk
Website: www.bttg.co.uk

Date: 29 May 2018
Our Ref: 25/08732B/04/18
Your Ref:
Page: 3 of 4

Client: Welhal Haima Carpet Group Co., Ltd

Colour Fastness to Sea Water

The sample was tested in accordance with BS EN ISO 105-E02:2013/ISO 105-E02:2013; the test device was positioned in the oven so that the test specimen was in a horizontal position.

The change of colour of the specimen/s and the staining of the adjacent fabric, multifibre DW, were assessed using standard grey scales; 5 represents no change of colour or staining and 1 a severe change of colour or staining.

Change of Shade	SCA*	Staining of SDC multifibre strip				
		cotton	nylon	polyester	acrylic	wool
4-5	4-5	4-5	4	4-5	4-5	4

* SCA = Secondary Cellulose Acetate

Colour Fastness to Shampoo

The sample was tested in accordance with BS ISO 18168:2015.

The change of shade of the specimen and the staining of the adjacent fabrics were assessed using standard grey scales; 5 represents no change of shade or staining and 1 a severe change of shade or staining.

Change of Shade	SCA*	Staining of adjacent fabric				
		cotton	nylon	polyester	acrylic	wool
4-5	4-5	4-5	4-5	4-5	4-5	4-5



1008

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Date: 29 May 2018
Our Ref: 25/08732B/04/18
Your Ref:
Page: 4 of 4

Client: Welhal Haima Carpet Group Co., Ltd

Colour Fastness to Rubbing

The sample was tested in accordance with BS EN ISO 105-X12:2016 using a Crockmeter as specified in section 4.1.2.

The staining of the cotton rubbing fabric was assessed using standard grey scales; 5 represents no staining and 1 represents severe staining.

Direction	Staining of rubbing fabric	
	10 rubs wet	10 rubs dry
Warp	5	5
Weft	5	5

Reported by: D Feltham D Feltham, Laboratory Technician

Countersigned by: [Signature] P Doherty, Operational Head

Enquiries concerning this report should be addressed to Customer Services



1008

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لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GREEN LABEL PLUS

INDOOR AIR QUALITY TESTING PROGRAM
THIS CERTIFIES THAT

Haima Carpet Co., Ltd

Address: No. 329, Qingdao South Road,
Weihai, Shangdong China

HAS MET THE REQUIREMENTS OF
THE CARPET AND RUG INSTITUTE'S GREEN
LABEL PLUS PROGRAM FOR CATEGORY:

11X Pre-dyed Nylon with EVA Backing

Range of Total VOCs
0.5 mg/m³ or less

Product Type: Broadloom

Joe W. Yarbrough, President
The Carpet and Rug Institute, Inc.

Certification Date: 06/30/2018
Expiration Date: 06/30/2020

To view all GLP-Certified products visit www.carpet-rug.org/glpproducts.

Page 1 of 1



THE CARPET AND RUG INSTITUTE
100 SOUTH HAMILTON STREET
DALTON GA 30720-4612 UNITED STATES



GLP100103

This product complies with
California DPH Section 01350
Version 1.2
Private Office Scenario.

A USGBC® recognized third
party certification program
for LEED v4 EQ Credit
Low-Emitting Materials.



ISO/IEC 17065
Product Certification Body
#0754



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

MARBLE

AMBRADOR & CREMA MARFIL



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

MÁRMOL/MARBLE
Crema Marfil Coto®

LEVANTINA
THE NATURAL STONE COMPANY



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

MÁRMOL/MARBLE

Crema Marfil Coto®

Descripción / Description

Roca marmórea de color crema, compacta de grano fino, en la que pueden presentarse pequeñas vetas oscuras irregularmente repartidas.

Creamy yellowish marble rock. Compact fine grain, in which small dark veins are irregularly scattered.

Acabados / Finishes

Admite cualquier tipo de acabado superficial: pulido, apomazado, escafilado, abujardado, etc.

The surface allows any type of finish, polished honed, bush-hammered, split face, etc.

Formatos / Formats

Bloque, tabla, losa y plaqueta.

Blocks, slabs, tiles and cut to size.

Aplicaciones / Applications

Especialmente indicado para interiores, pavimento, aplacado, escaleras, y en general para cualquier solución arquitectónica.

Especially suitable for interiors, flooring, cladding, staircases, and in general for any architectural solution.



Tabla/Slab



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

MÁRMOL/MARBLE

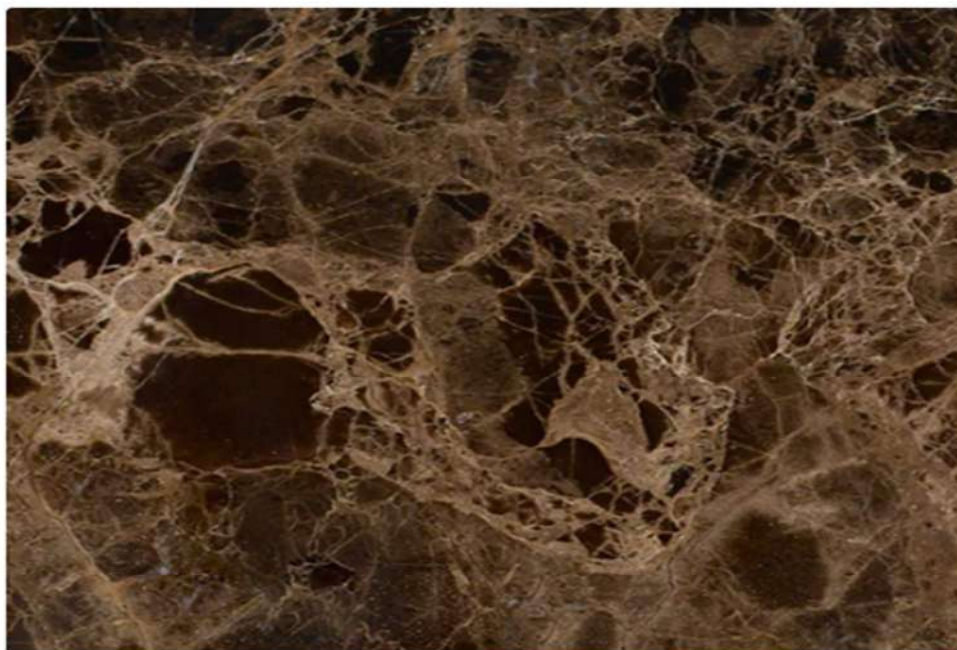
Crema Marfil Coto®

Características Features	Método de ensayo Test Method	Valor Declarado Declared value
Denominación petrográfica Petrographic denomination	UNE-EN 12407	Biosparita Biosparite
Densidad aparente (Kg/m3) Apparent density (Kg/m3)	UNE-EN 1936	2690
Porosidad abierta (%) Open porosity (%)	UNE-EN 1936	0,4
Absorción de agua a presión atmosférica (%) Water absorption by atmospheric pressure (%)	UNE-EN 13755	0,5±0,1
Absorción de agua por capilaridad (g/m ² s0,05) / Water absorption by capillarity (g/m ²)	UNE-EN 1925	0,73±0,31
Permeabilidad al vapor de agua (Å) Permeability to the water steam (Å)	UNE-EN 12524	200/250
Resistencia a la compresión (MPa) Compression resistance (MPa)	UNE-EN 1926	165±26,5
Resistencia a la flexión bajo carga concentrada (MPa) (sin refuerzo) Flexural strength under concentrated load (MPa) (without reinforcement)	UNE-EN 12372	91
Resistencia a la heladicidad después de 56 ciclos hielo-deshielo (%) (con refuerzo) Decreasing of flexural strength after 56 cycles frost-thaw (%) (with reinforcement)	UNE-EN 12371:02	15
Resistencia a la abrasión (mm) Abrasion resistance (mm)	UNE-EN 14157	20,5±0,4
Energía de rotura Rupture energy (J)	UNE-EN 14158	3,1±0,3
Resistencia a la cristalización de sales (pérdida de peso) Resistance to salt crystallization (weight loss)	UNE-EN 12370	0,05±0,01
Resistencia al deslizamiento Slip resistance after	UNE-EN 14231:2004	Húmedo Wet 11 Seco Dry 37
Acabado superficial pulido (SRV húmedo) / Polished surface finish (SRV wet)		32
Acabado superficial apomazado (SRV húmedo) / Honed surface finish (SRB wet)		60
Acabado superficial bruto (SRV húmedo) / Rough surface finish (SRV wet)		±35 40
Carga de rotura de anclaje (N) Breaking load at dowel hole (N)	EN 13364	1850
Valor Medio / Mean Value		1258
Valor Mínimo esperado / Low expected value		
Reacción al fuego Fire reaction	Decisión Comisión Committee decision 96/603/EC	Clase A, Class A,

*Disponibile declaración de conformidad / EC declaration of conformity available CE



لوفتهانزا العالمية المحدودة
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Dark Emperador

Dark Emperador is an exquisite polished marble from Spain featuring a range of dark rich browns and grays. This marble is recommended for interior use in residential and commercial buildings for flooring, walls and countertops.

Room Scene



Overview & Size

Technical Specification

Gallery by Houzz

Building Information Modeling (BIM)

Technical Specifications

Absorption by Weight, %

Metric

0.197

ASTM

C97

Density, Lbs./ft³(kg/m³)

163.8

C97

Compression Strength (MPa)

12708.0

C170

Abrasion Resistance. Hardness

10.2

C241

Flexural Strength psi, (MPa)

834.0

C880



Light Emperador

Technical Data Sheet



Description :

Emperador Light marble from Turkey is a stunning blend of creams, browns and beiges that swirl together effortlessly. Available in slabs and a variety of floor tiles and mosaics for easy coordination, use this collection to create beautiful marble countertops, backsplashes, marble tile marble tile floors, accent walls, and other features throughout homes and commercial properties.

Technical Specifications :

Classification	Marble
Origin	Turkey
Availability	Medium
Main Application	Interior
Compression tensile strength:	1580 kg/cm ²
Tensile strength after freeze-thaw cycles:	1584 kg/cm ²
Unitary modulus of bending tensile strength:	210 kg/cm ²
Heat expansion coefficient:	-
Water imbibition coefficient:	0,04000
Impact strength:	35 cm
Frictional wear:	1.90 mm
Mass by unit of volume:	2702 kg/m ³

Products:

These marbles are light in colour with rich mocha swirls running throughout. Emperador Marble has always been a showstopper; hardwearing and versatile, this tile is sure to make an impact wherever it is installed. This tile is available in a polished finish which looks stunning within large properties and bathrooms.

Other names Emprador; Emparador; Turkish Emperador; Emperador marble

Applications Flooring; Coverings; Bath design; Interior decoration



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Shower Glass



لوفتهانزا العالمية للمقاولات
Lufthansa International Contractors Ltd.

LEVANTINA
THE NATURAL STONE COMPANY

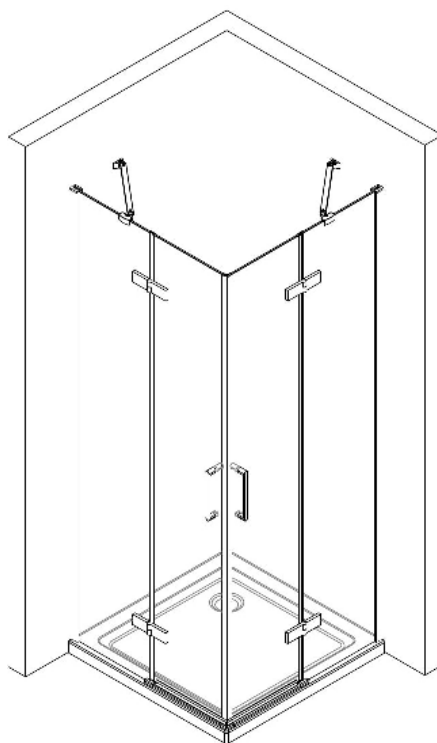


لوفتهانزا العالمية المحدودة
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DE EN FR IT

DUSCHKABINE EX 809

BERNSTEIN



MONTAGEANLEITUNG - IV / 2018



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

DE EN FR IT Duschkabine EX809

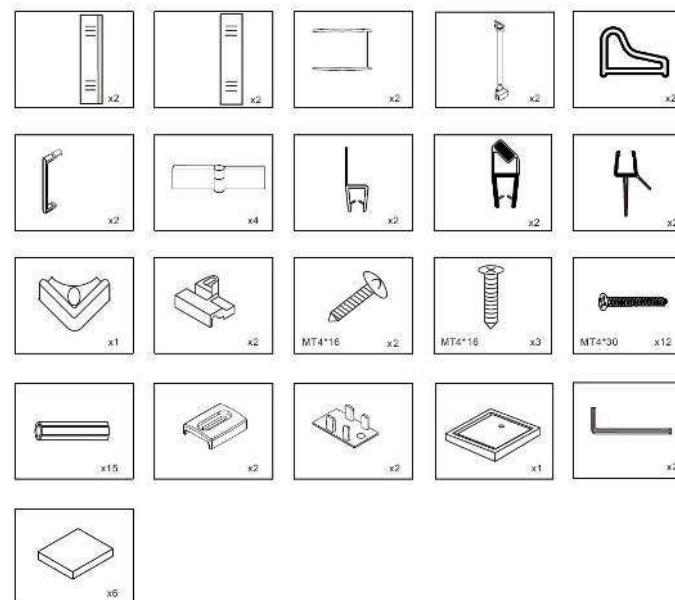
BENÖTIGTES WERKZEUG



ACHTUNG:

Alle Schrauben, die in Verbindung zum Glas sind, bitte nicht mit einem Akkubohrer anziehen, nur per Hand.

LIEFERUMFANG:





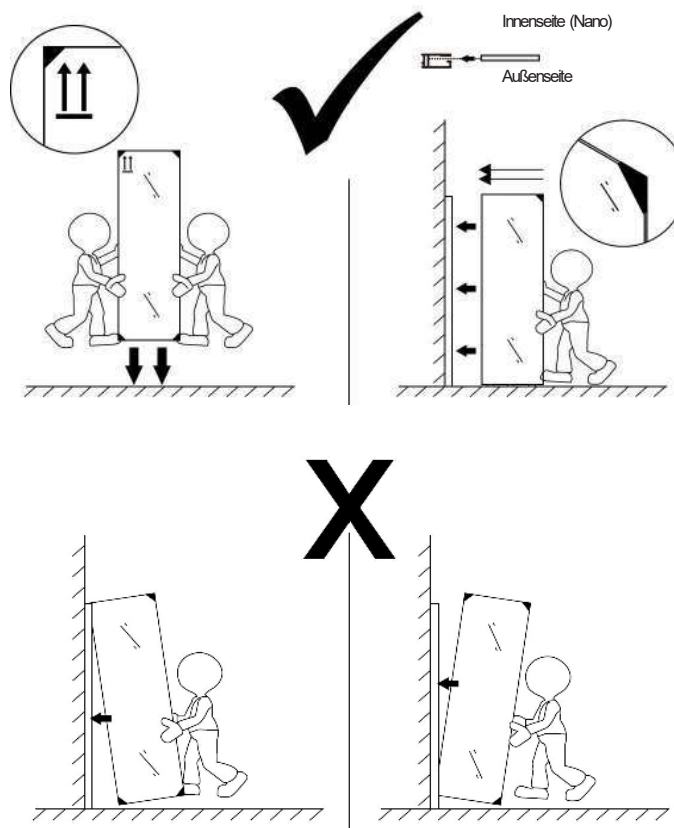
لوفتهانزا العالمية المحدودة
Lufthansa International Limited

BERNSTEIN

BITTE BEACHTEN

Pfeile zeigen auf der Außenseite nach oben.

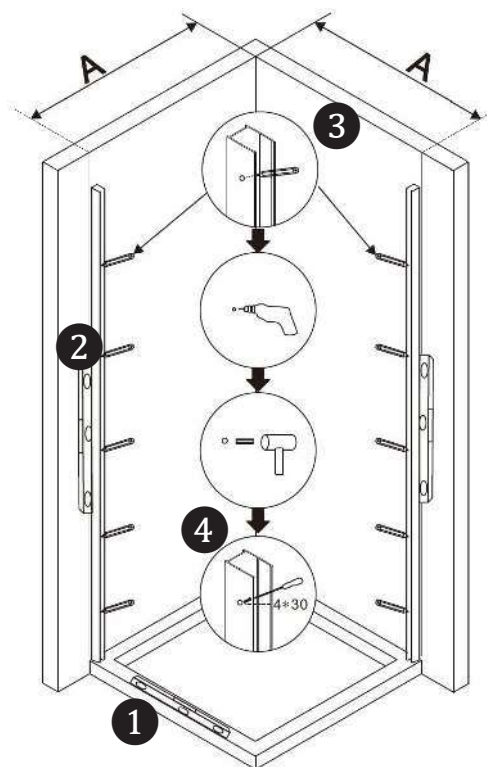
Ohne Pfeile beidseitig verwendbar.



DE EN FR IT Duschkabine EX809

MONTAGE

1. Richten Sie die Duschtasse mit der Wasserwaage aus und schließen Sie den Ablauf an.
2. Richten Sie auch die Profile, wie auf dem Bild unten zu sehen, mit der Wasserwaage aus und markieren Sie die Bohrlöcher mit einem Stift.
3. Bohren Sie die 6mm Löcher an der Wand.
4. Verschrauben Sie die Profile mit Hilfe der Dübel. Bitte benutzen Sie ausschließlich Dübel, welche für Ihre Wände geeignet sind.



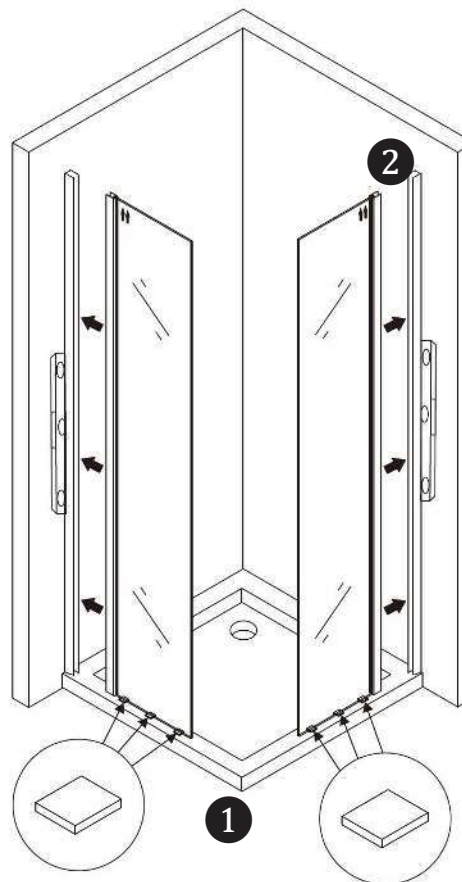


لوفتهانزا العالمية المحدودة
Lufthansa International Limited

BERNSTEIN

1. Setzen Sie die kleine Gummipuffer zwischen Glas und Duschtasse.
2. Schieben Sie nun die festen Glaselemente in die Aluminiumprofile.

Wichtig: Die Innenseite des Glaselements ist nanobeschichtet und die Außenseite ist mit einer Markierung versehen.

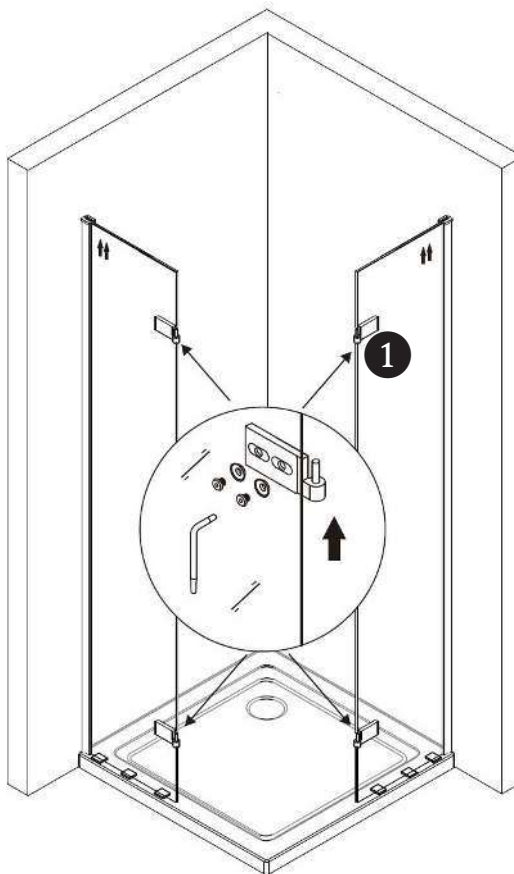




لوفتهانزا العالمية المحدودة
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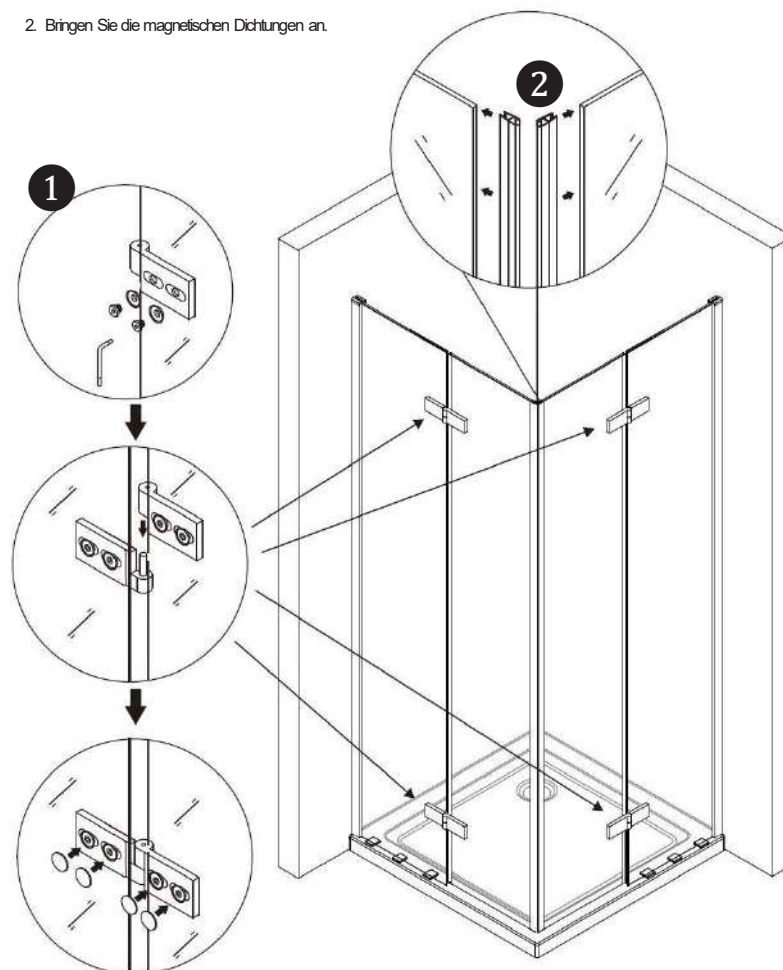
DE EN FR IT Duschkabine EX809

1. Verschrauben Sie die tragenden Scharniere für die Glastüren mit den festen Glaselementen. Die Drehbozen zeigen wie in unserer Darstellung zu sehen alle nach oben.





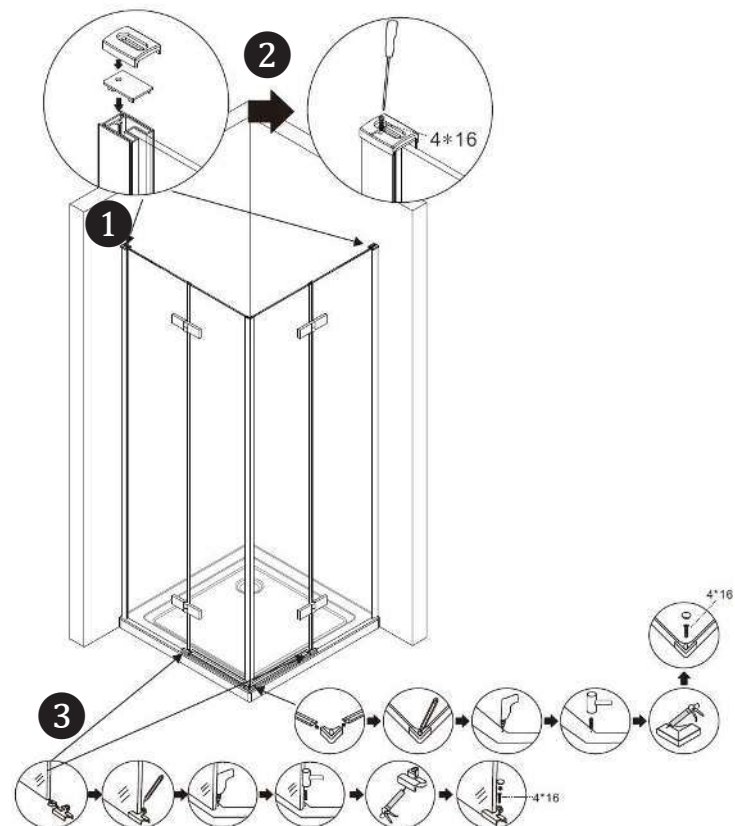
1. Verschrauben Sie jetzt die Scharniere an den Glastüren.
2. Bringen Sie die magnetischen Dichtungen an.





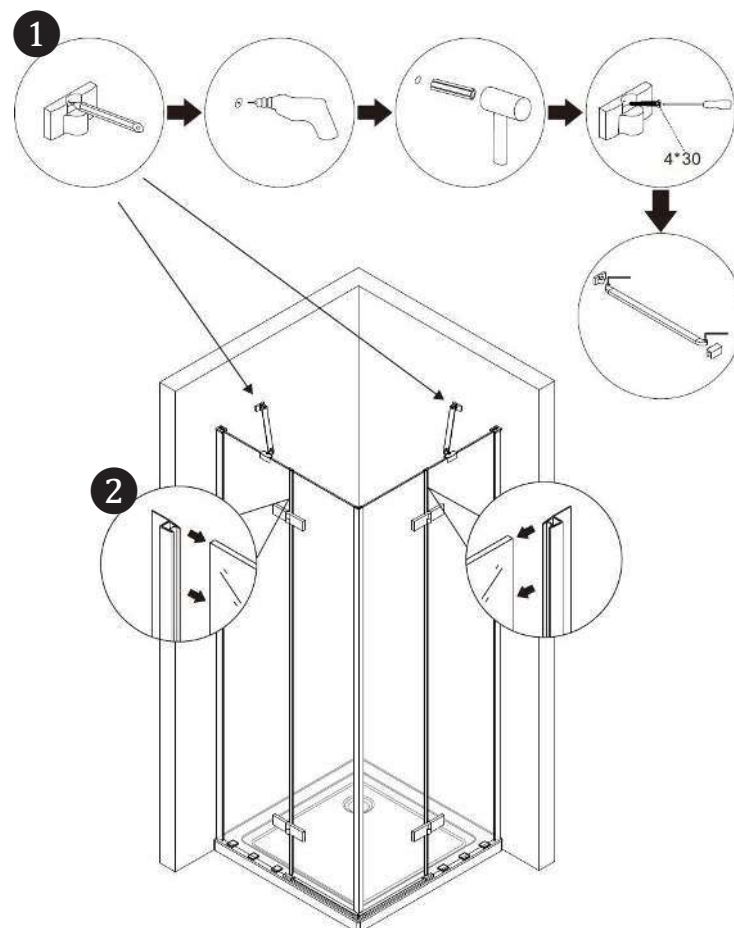
DE EN FR IT Duschkabine EX809

1. Durch die Ausrichtung der Glaselemente in den Endprofilen erreichen sie die Leichtgängigkeit der Türen und des Magnetverschlusses.
2. Setzen Sie die Fixierplatte und die Abdeckkappe auf das Profil und schrauben Sie diese fest.
3. Installieren Sie die Schwelleisten unter den Glstüren.





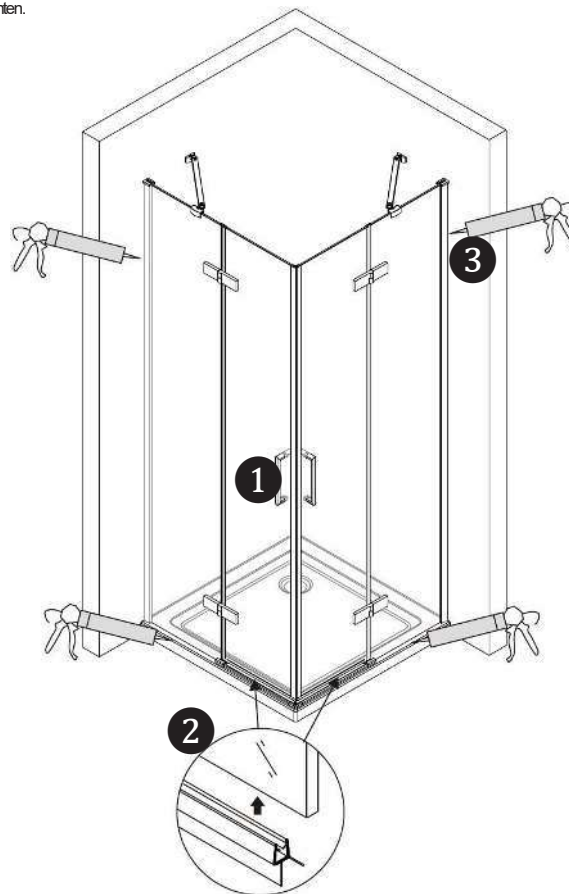
1. Installieren Sie die Stabilisatoren zwischen den festen Glaselementen und der Wand.
2. Platzieren Sie die Dichtungen an den Glastüren.





DE EN FR IT Duschkabine EX809

1. Verschrauben Sie nun die beiden Türgriffe.
2. Stecken Sie die Türdichtungen unten an die Glasüren.
3. Ziehen Sie die Silikonfugen, wie im Bild unten gezeigt, entlang der Aluminiumprofile und den festen Glaselementen.





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

EN FR IT

BERNSTEIN



DE ERKLÄRUNG

Die Bedienungsanleitung dient nur als Referenz. Diese Anleitung kann abweichende Angaben enthalten. Die beschriebenen Produkte können jederzeit aktualisiert werden. Die Zeichnungen in dieser Anleitung dienen nur zur Darstellung und haben keinen Anspruch auf Aktualität.

EN STATEMENT

This instructions should only be considered as a standard manual. Modifications applied to updated version of the product might not be mentioned inside this document. In this case, please just use the manual as a reference. The company reserves modification rights.

FR EXPLICATIONS

Les renseignements figurant dans cette notice de montage ne sont communiqués qu'à titre d'information et peuvent être mis à jour sans préavis. Toutes les figures et dessins présents dans ces instructions sont uniquement à titre d'illustration et n'ont aucune valeur d'actualité.

IT DICHIARAZIONE

Il seguente manuale è solo una guida standard. Nel caso in cui dovessero essere presenti errori, dovuti a eventuali modifiche postume del prodotto, si prega di considerare il manuale unicamente come riferimento per il montaggio. L'azienda si riserva il diritto di modifica.



لوفتهانزا العالمية المحدودة
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Radia Square 32 x 32 x 71 ½ in. 6mm Sliding Shower Door for Corner

Model number: 137447-900-084-000

Dimensions: 32" x 32" x 74.5"

Installation: Corner

Material:



Standard Features:

- 6 mm tempered glass with Lotus glass protection
- Magnetic and aluminum extrusion for a better watertight closure and provides panel rigidity
- Panels are pre-assembled with hardware and side jambs
- 3/4 in. of out of plumb adjustment for those not so perfect walls

Product characteristics:

- Hardware Pre-installed
- Lotus Easy Clean Glass Protection
- Available in Multiple Finishes

Frame Finish(es):



Brushed Nickel



Chrome



Matte Black

Glass Pattern(s):



Clear



French

Certifications

MAAX products adhere to one or more of the following certifications:



MAAX



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

Radia Square 32 x 32 x 71 1/2 in. 6mm Sliding Shower Door for Corner

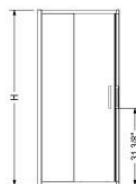
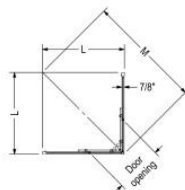
Model number: 137447-900-084-000

Dimensions: 32" x 32" x 74.5"

Installation: Corner

Material:

STANDARD



Dimensions

32 x 32 x 74 1/2 In.
(813 x 813 x 1892 mm)

Weight

101 lbs - 45 3/4 kg

Frame Type

Semi-frameless

Door Adjustment

Semi-frameless

Code	Description	H	L Adjustable	Door Opening	Wall adjustment
137447	RADIA Square 32" X 32" X 71.5"	71 5/8"	29 7/8" - 30 5/8"	15 3/16"	3/4"
137448	RADIA Square 36" X 36" X 71.5"	71 5/8"	32 15/16" - 33 3/4"	17 5/16"	3/4"
137451	RADIA Square 42" X 42" X 71.5"	71 5/8"	40 3/4" - 41 1/2"	22 13/16"	3/4"

All dimensions are approximate. Structure measurements must be verified against the unit to ensure proper fit.

Project: _____
Contractor: _____
Representative: _____
Date: _____
Tel: _____
Notes: _____

MAAX

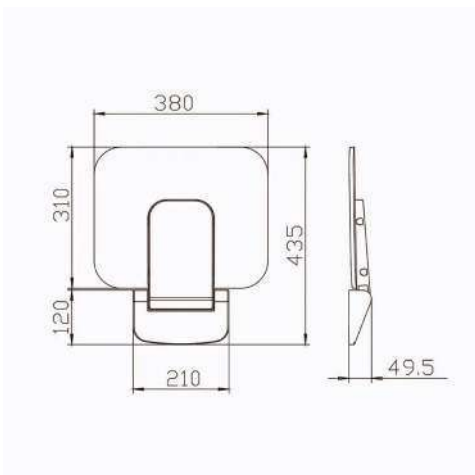


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Lufthansa International Limited

SHOWER SEAT



لوفتهانزا العالمية المحدودة
Lufthansa International Limited



Shower seat with duroplast aquare
loading bear 200 kgs
folding 90 degree
easy to clean
large sitting board
xiamen Sunten



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

LIGHTNING



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

PHILIPS
SLC
Saudia Lighting
2017 - 2018
Professional Lighting
Indoor Lighting

Accent light

Accent lighting on floors and walls is essential to the overall illumination in a break-out area and how warm and sociable the space feels. If you add additional floor lamps, you can create a truly distinctive atmosphere that feels quite different from the usual workspace and creates a more intimate environment.



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Core Line Recessed FlexAccent Recessed FlexAccent G2 Green Space Accent





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Accent light
CoreLine Recessed Spot



CoreLine Recessed Spot

The clear choice for LED

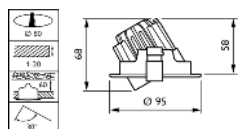
CoreLine Recessed Spot is a recessed spot range designed to replace halogen-based luminaires. Its halogen-like look and attractive price make it easier for customers to make the switch to LED. This product provides a natural lighting effect for accent lighting applications, as well as instant energy savings and much longer lifetime – an environmentally friendly solution. With the push-in connectors, installation is fast and straight-forward.

Features and Benefits

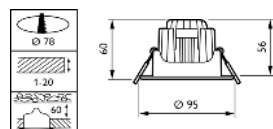
- High-end material and finish for decorative applications; dedicated optics for halogen reflector look and glare control
- 80% energy saving and 15times longer lifetime compare to standard halogen-based luminaires
- Due to its slim design it fits in most types of ceiling; compatible with nearly all wallmounted dimmers
- Wide portfolio to cover multiple application spaces; from bathroom to diningroom
- Available in fixed and adjustable versions
- Different finishes available
- Choice of color temperatures: 2700, 3000, 4000 K and DimTone (dim 3000K to 2200K)
- Available in two light levels: 650 lumen (standard halogen) 1200 lumen (CDM-T 20W Standard)
- Available in two beam angles: 32D Medium Beam 60D Very Wide Beam
- Slim design; smaller than 60 mm
- Push-in connector with through-wiring option
- High Performance Dimming driver
- Chip-on-Board (COB) technology

Product size

All dimensions in millimeters



CoreLine RS140B/RS141B



CoreLine RS140B/RS141B

125

Accent light



IP20 / IP54
up to 30Khrs
up to 60 lm/W

Technical parameters	
Type	RS140B (fixed version) RS141B (adjustable version)
Ceiling type	Plaster (board) ceiling
Light source	Non replaceable LED module
Power	11 and 16 W
Beam angle	32 and 60°
Luminous flux	650 lm
Correlated Color Temperature	2700, 3000 or 4000 K DimTone
Color Rendering Index	85
Median useful life L70B50	50,000 hours
Median useful life L80B50	30,000 hours
Median useful life L90B50	15,000 hours
Driver failure rate	15% per 5000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	230 or 240 V / 50-60 Hz
Dimming	Compatible with commercial available phase-cut, leading and trailing edge dimmers
Material	Housing: aluminum
Color	White Brushed aluminum
Optical cover	Polycarbonate, clear
Connection	Push-in connector or with pull relief
Installation	Fixation by means of spring fasteners Through-wiring possible
Remarks	Internal optical unit 30° tiltable





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Accent light
FlexAccent Recessed



FlexAccent Recessed

Supporting a general feeling of health and well-being

FlexAccent is the new LED solution for shop targeting energy saving. The system efficacy is 75lm/W in average, indicating more than 30% energy efficient compared to CDM solution.

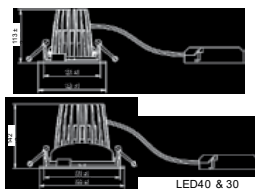
The compact design of FlexAccent is another unique selling proposition, thanks to the excellent thermal design eliminating the cooling fan.

Features and Benefits

- Diversity: plenty of choices on form factor, lumen output and optics
- Energy saving: >30% energy efficient compared to CDM solution
- Competitive price: 1on 1 replacement over conventional CDM light
- System efficacy up to 85 lm/W
- CRI 80, CRI90 optional for 3000K (CrispWhite Tech)
- High reliability, 30k hours (L70@25°C)

Product size

All dimensions in millimeters



FlexAccent Recessed – RS291B

127

Accent light



IP20
up to 30khrs
up to 85 lm/W

Technical parameters

Type	FlexAccent.RS291B (Recessed)
System lumen output	1000lm, 2000lm, 3000lm, 3900lm
Voltage	220-240V 50/60Hz
Power consumption	13W / 28-29W / 38-42W / 47-50W
Efficacy	70lm/W ~ 85lm/W
Power factor	0.9
LED driver	Fixed output
SDCM	<=5
CRI	80 (90 optional for 3000K)
Color temperature	3000K / 4000K / CW - CrispWhite (CRI90) for 3000K only
Form factor (Recessed)	RS291B (refer to the picture)
Materials and finishing	Optics: MCPET high reflectance film, PMMA diffuser with high haze and light
transmission Lifetime	30,000 hours (70% lumen maintenance @ Ta = 25°C)
Working Temperature Range	- 20°C ≤ Ta < 40°C
Cut-out (Recessed)	125mm (1000lm, 2000lm) / 175mm (3000lm, 3900lm)
Weight	RS291B LED10&LED20: 0.85KG RS291B LED30&LED40: 1.52KG
IP rating	IP20
Certifications	CB, CCC





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Accent light
FlexAccent G2



FlexAccent G2

High performance in a robust and compact design

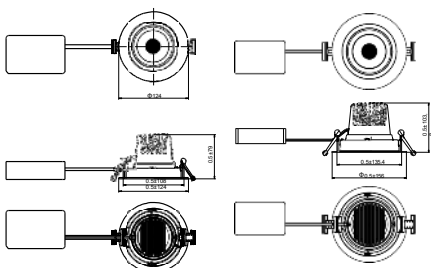
FlexAccentG2 is a functional LED accent lighting product delivers substantial energy saving and with PremiumWhiteCoBLED technology offers an optimized color spectrum that enhances look of your items. It creates a very "true" lighting effect—the real CDM-Ellite replacement. It offers diverse configurations from recessed, modular and track mounted, with 1000lm to 4000lm output head. It could apply to shopping mall, retail store, fashion shop, hotel etc.

Features and Benefits

- Quality of light, influence customer's shopping experience positively
- Compact and stylish design to ease installation
- Diversity, different lumen package, CCT, and type of mounting to cater for different customers' needs
- High CRI option, CRI80 or 90
- "True" light (3000K) -PremiumWhite
- SDCM <4
- High reliability, 30k hours (L70B50@25°C)

Product size

All dimensions in millimeters



RS39 1B LED10 & LED20

RS39 1B LED30 & LED35

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Accent light



Technical parameters					
Model	RS391B Recessed				
	LED10	LED20	LED30	LED35	
Lumen output	3 000 k	1000 lm	1900 lm	3100 lm	3500 lm
(CRI 80)	4 000 K	1100 lm	2100 lm	3400 lm	3900 lm
SDCM	<4				
CRI	80 / 90				
CCT	3000K(PremiumWhite)/4000K				
Voltage	220-240V 50/60Hz				
Rotation angle	4 000 K	3 000 lm	1 000 lm	3 000 lm	3 000 lm
	Tilt 30°(2 sides); Pan 360°				
Power consumption	12 W	26 W	39 W	48 W	
LEDdriver	Fixed output (remote SELV driver with 0.3m length cable), THD<30% NR				
Materials and finishing	Metal housing with powder coating, matt finishing white RAL9010 (also available in white color of RAL9003 via ETO)				
Beam Angle	18°	20°	20°	22°	22°
Lifetime	30,000 hours (70% lumen maintenance @ 25°C)				
Working Temperature Range	-15°C< Ta < 35°C				
Dimensions(Diax H)	Ø124x79 (mm)	Ø124x79 (mm)	Ø156x104 (mm)	Ø156x104 (mm)	
IP rating,Class	IP20, Class II			mm	
Certifications	CB, EMC, CE, SAA, CCC				





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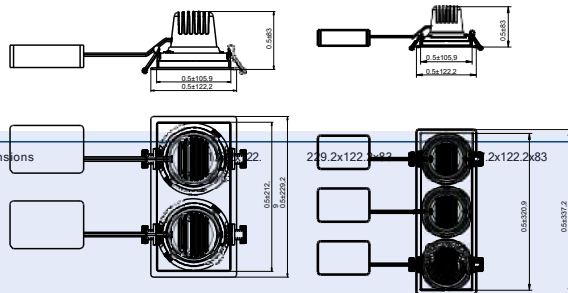
Accent light

FlexAccent G2

up to 30khrs
up to 100 lm/W



Technical parameters							
Model	GD391B Modular						
	1xLED10	1xLED20	2xLED10	2xLED20	3xLED10	3xLED20	
Lumen output	3000k 1000 lm	1900 lm	2000 lm	3700 lm	3000 lm	5600 lm	
(CRI 80)	4000K 1100 lm	2100 lm	2200 lm	4200 lm	3400 lm	6300 lm	
	<4						
Lumen output	3000k 900 lm	1700 lm	1800 lm	3300 lm	2700 lm	5000 lm	
(CRI 90)	4000K 980 lm	1800 lm	1900 lm	3600 lm	2900 lm	5400 lm	
	220-240V 50/60Hz						
LED driver	Fixed output, non-dimming LED driver with 0.3m length cable, THD<30% NR						
Materials and finishing	Metal housing with powder coating, matt finishing white RAL9010 (also available in white color of RAL9003 via ETO)						
Lifetime	30,000 h@L6 (70% lumen maintenance @ 25°C)						
Working Temperature Range	-15°C< Ta < 35°C						
Out-out	L:112mm W:116mm	L:219mm W:116mm	L:326mm W:116mm				



GD391B 2xLED10 & 2xLED20

GD391B 3xLED10 & 3xLED20

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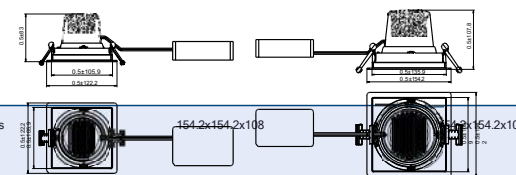
Accent light



up to 30khrs
up to 100 lm/W



Technical parameters			
Model	GD391B Modular		
	1xLED30	1xLED35	
Lumen output	3000k 3100 lm	3500 lm	
(CRI 80)	4000K 3400 lm	3900 lm	
	<4		
SDCM	<4		
CRI	80 / 90		
OCT	3000K(PremiumWhite)/ 4000K		
(CRI 90)	4000K 3000 lm	3000 lm	3300 lm
Voltage	220-240V 50/60Hz		
LED driver	Fixed output, non-dimming LED driver with 0.3m length cable, THD<30% NR		
Materials and finishing	Metal housing with powder coating, matt finishing white RAL9010 (also available in white color of RAL9003 via ETO)		
Lifetime	30,000 h@L6 (70% lumen maintenance @ 25°C)		
Working Temperature Range	-15°C< Ta < 35°C		
Out-out	L:142mm X W: 147mm		



GD391B 1xLED10 & 1xLED20

GD391B 1xLED30 & 1xLED35



GreenSpace Accent Elbow

A flexible and affordable retail toolbox

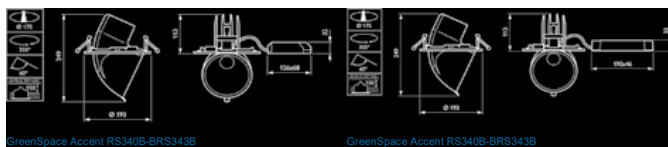
Thanks to the GreenSpace Accent family, retailers and building operators can make the switch from CDM to LED and enjoy Philips PerfectAccent light quality as well as significant energy savings – all for a reasonable initial investment. GreenSpace Accent Elbow's regular cut-out makes retrofit installation quick and easy by a single installer. For food retailers, GreenSpace Accent Elbow comes with special light recipes to enhance the store ambience and show the product in the very best light: Fresh Food Champagne is the perfect solution for displaying fruit, vegetables, cheese, bread and pastries in a warm lighting ambience, while Fresh Food Meat creates the best light setting for meat enhancement in a cool natural ambience. Fashion retailers can also choose from a variety of light flavors: CrispWhite is the clear choice to make colors appear rich and intense while keeping whites bright, and PremiumWhite is the best CDM alternative for high color rendering in a warm lighting ambience.

Features and Benefits

- Hassle-free replacement of CDM recessed luminaires
- Short payback compared with CDM luminaires due to high system efficacy
- High-quality accent lighting thanks to PerfectAccent reflector's light signature
- High efficacy
- Philips PerfectAccent quality of light
- CDM retrofit recessed luminaire; easy to install
- Clean, robust design

Product size

All dimensions in millimeters



GreenSpace Accent RS340B-BRS343B

GreenSpace Accent RS340B-BRS343B



up to 700lm

up to 72 lm/W

Technical parameters	
Type	RS342B
Ceiling type	Plaster (board) ceiling
Light source	Non-replaceable LED module
Power	18, 29 and 38.5 W (for light color 830, LED17S, LED27S, LED39S) 30 and 46.5 W (for light color Fresh Food Meat, LED19S and LED26S) 44 W (for light color Fresh Food Champagne, LED27S) 21, 33 and 50 W (for CrispWhite LED17S, LED27S, LED39S) 19.4, 28.5 and 48.5 W (for PremiumWhite LED17S, LED27S, LED39S)
Beam angle	12° (NB), 25° (MB), 37° (WB)
Luminous flux	1700, 2700, 3900 lm (for light color 830) 1900 or 2600 lm (for light color Fresh Food Meat, LED19S or LED26S) 2600 lm (for light color Fresh Food Champagne, LED27S) 1700, 2700, 3600 lm (for light color CrispWhite)
Correlated Color Temperature	2700, 3000 and 4000 K (827, 830, 840) Fresh Food Meat (FMT) Fresh Food Champagne (CH) CrispWhite (CRW) PremiumWhite (PW9)
Color Rendering Index	>80 (for 2700, 3000 and 4000 K) >90 (for Fresh Food Champagne, Fresh Food Meat and PremiumWhite) >92 (for CrispWhite)
Standard deviation color matching (SDCM)	3 (with a tolerance of ±0.005 on color point measurement)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	220-240 V / 50-60 Hz
Dimming	DALI dimming and Constant Light Output
Material	Housing and rim: die-cast aluminum Cover: acrylic
Color	White (RAL9003), silver (RAL9006) and black (RAL9004)
Connection	Push-in connector or with pull relief Wieland/Adels compatible connector with cable length 0.5 m (CW) Push-in connector with loop through wiring enabled for non DALI versions (CU3) Push-in connector with loop through wiring enabled for DALI versions (CU5)
Installation	Fixation by means of spring fasteners
Remarks	Fresh Food Champagne (CH) is the dedicated light recipe for bread and pastries, fruits and vegetables area. It brings a warm traditional ambience. Fresh Food Meat (FMT) is a dedicated light recipe for meat counters. It brings a natural cool light setting. CrispWhite (CRW) is the dedicated light recipe for fashion retailers which makes whites appear pure and bright white at the same time making other colours appear warm, saturated and intense PremiumWhite is the best CDM Elite alternative for high color rendering with a warm color of light for fashion and food retailers.



GreenSpace Accent Adjustable

A flexible and affordable retail toolbox

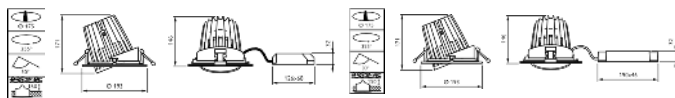
Features and Benefits

Lighting is one of the key assets that can help retailers and building operators achieve their cost targets. Until now, many have been reluctant to switch from CDM to LED technology because the efficiency, initial investment, installation process, light level and/or quality of light of new LED solutions were not on par with their CDM existing solutions. This is no longer the case, thanks to GreenSpace Accent. Now, retailers and building operators can make the switch and enjoy the benefits of Philips PerfectAccent light quality as well as significant energy savings compared to their existing CDM installation – all for a reasonable initial investment. And GreenSpace Accent's regular cut-out makes retrofit installation quick and easy.

- Hassle-free replacement of CDM recessed luminaires
- Short payback compared with CDM luminaires due to high system efficacy
- High-quality accent lighting thanks to PerfectAccent reflector's light signature
- High efficacy
- Philips PerfectAccent quality of light
- CDM retrofit recessed luminaire
- Clean, robust design

Product size

All dimensions in millimeters



GreenSpace Accent RS340-BRS343B

GreenSpace Accent RS340-BRS343B



up to 700hrs

up to 100 lm/W

Technical parameters	
Type	RS341B
Ceiling type	Plaster (board) ceiling
Light source	Non-replaceable LED module
Power	18, 29.5 and 37 W (for light color 830 and 840, LED17S, LED27S, LED35S)
Beam angle	24° (MB), 36° (WB)
Luminous flux	1750, 2700, 3500 lm (for light color 830) 1850, 2900, 3800 lm (for light color 840)
Correlated Color Temperature	3000 and 4000 K
Color Rendering Index	>80 (for 3000 and 4000 K)
Standard deviation color matching (SDCM)	3 (with a tolerance of ±0.005 on color point measurement)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	220-240 V / 50-60 Hz
Dimming	DALI dimming on request
Material	Housing and rim: die-cast aluminum Cover: acrylic
Color	White (RAL9003), silver (RAL9006) and black (RAL9004)
Connection	Push-in connector or with pull relief
Installation	Fixation by means of spring fasteners





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Accent light
GreenSpace Accent Cardanic



GreenSpace Accent Cardanic

A flexible and affordable retail toolbox

With the GreenSpace Accent family, retailers and building operators can now make the switch from CDM to LED and enjoy the benefits of Philips PerfectAccent light quality as well as significant energy savings – all for a reasonable initial investment. GreenSpace Accent Cardanic's regular cut-out and specific lumen packages make retrofit installation quick and easy. For fashion and food retailers, GreenSpace Accent Cardanic is available with special light flavors and LED recipes to show the clothes and fresh food produce on offer in the very best light.

Features and Benefits

- High lumen output from very compact, low-height luminaire
- Cardanic suspension (two separately tilting rings)
- Wide application coverage
- Excellent quality of light enabled by Philips PerfectAccent optics
- High energy efficiency
- Clean and robust design
- One-to-one CDM replacement

Product size

All dimensions in millimeters



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Accent light



up to 700lm

up to 100 lm/W

Technical parameters	
Type	RS343B
Ceiling type	Exposed- and symmetrical concealed T-bar ceiling and plaster (board) ceiling
Light source	Non-replaceable LED module
Power	1700 lm - 15 W, 2700 lm - 27 W, 3900 lm - 34.5W at 3000 K 1900 lm - 26 W, 2600 lm - 39 W at FMT
Beam angle	NB (10°), MB (24°), WB (36°)
Luminous flux	1750, 2800, 4000 lm at 3000 K 1900, 2600 lm at FMT 2700 lm at CH
Correlated Color Temperature	2500 K (for Fresh Food Champagne CH) 2700 K 3000 K (for 830, PremiumWhite PW9, CrispWhite CRW, Fresh Food Meat FMT) 4000 K
Color Rendering Index	80 for /827 /830 /840 /FMT /CH 90 for /PW9 >95 for /CRW
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	230 or 240 V / 50 - 60 Hz
Dimming	Non-dimmable (PSU-E) DALI-dimmable (PSD-E)
Material	Housing: die-cast aluminum
Color	White (WH, RAL9003), Black (BK, RAL 9004), Silver (SI, RAL9006)
Optic	Metallised polycarbonate
Optical cover	PMMA, clear
Connection	Push-in connector with pull relief (PIP), 3-pole Wieland/Adels plug (CW3), 3-pole Wieland/Adels plug with lock (CW-L)
Installation	Fixation by means of spring fasteners Through-wiring possible
Accessories	None



GreenSpace Accent Gridlight

A flexible and affordable retail toolbox

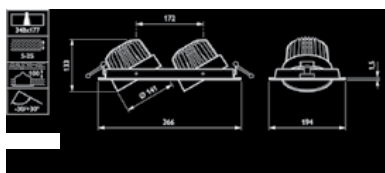
Thanks to the GreenSpace Accent family, retailers and building operators can now make the switch from CDM to LED and enjoy the benefits of Philips PerfectAccent light quality as well as significant energy savings – all for a reasonable initial investment. GreenSpace Accent Gridlight's regular cut-out and two clips make retrofit installation quick and easy by a single installer. For fashion retailers, GreenSpace Accent Gridlight is also available with special light flavors to show the clothes and goods on offer in the very best light. CrispWhite is the clear choice for fashion retailers to make colors appear rich and intense while keeping whites bright. PremiumWhite is the best CDM Elite alternative for high color rendering with a warm light ambiance.

Features and Benefits

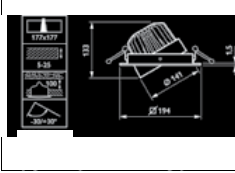
- Hassle-free replacement of CDM recessed luminaires
- Short payback compared with CDM luminaires due to high system efficacy
- High-quality accent lighting thanks to PerfectAccent reflector's light signature
- CDM retrofit luminaire
- Clean and robust design
- High efficacy
- Philips PerfectAccent light quality

Product size

All dimensions in millimeters



GD302B



GD30 B

up to 700hrs

up to 110 lm/W

Technical parameters	
Type	GD302B (double-recessed gridlight version) GD301B (single-recessed gridlight version)
Ceiling type	Plaster (board) ceiling
Light source	Non-replaceable LED module
Power	15, 25.5 and 32 W for light colors 830/840, GD302B LED17S/LED27S/ LED35S 15, 25.5 and 32 W for light colors 830/840, GD301B LED17S/LED27S/ LED39S
Beam angle	10° (NB), 24° (MB), 36° (WB)
Luminous flux	Per head in the double gridlight: 1700 lm (light color 830, PW9 and CRW) 1800 lm (light color 840) 1600 lm (light color 827) 2700 lm (light color 830, PW9 and CRW) 2900 lm (light color 840) 2500 lm (light color 827) 3500 lm (light color 830 and PW9) 3700 lm (light color 840) 3300 lm (light color 827) For single gridlight: 1700, 2700 and 3900 lm (light color 830)
Correlated Color Temperature	3000, 4000, 2700 K, PremiumWhite and CrispWhite
Color Rendering Index	> 80 (for 3000, 4000 and 2700 K) > 90 (for PremiumWhite and Crisp-White)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	220-240 V / 50-60 Hz
Dimming	DALI dimming available
Material	Housing: die-cast aluminum Rim: steel plate, bended Ring: polyamide Cover: PMMA
Color	White (WH, RAL9003), black (BK, RAL 9004) and silver (SI, RAL9006)
Optical cover	Polycarbonate
Connection	Push-in connector (PI) Wieland/Adels compatible (CW) Wieland/Adels with locking security (CW-L)
Installation	Fixation by means of 2-spring fasteners
Through-wiring possible	Through wiring available by default for all options for double gridlight
Accessories	No accessories
Remarks	DC compatibility available by default for all options for double gridlight



StoreFlux gen3 rim

Powerful LED accent lighting that blends perfectly in the store architecture

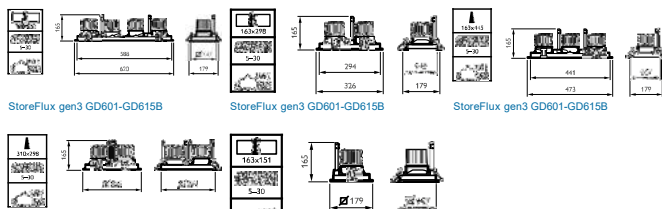
Features and Benefits

The StoreFlux gridlight can be equipped with up to four LED modules with a special reflector system to deliver top-quality light that makes your shop and merchandise look great. The combination of multiple LED sources with high lumen packages in one luminaire creates sparkling light effects. StoreFlux offers low maintenance compared with CDM and high efficiency compared to halogen.

- High-quality accent lighting thanks to PerfectAccent reflector's light signature
- Short payback compared with CDM luminaires due to high system efficacy
- Efficient and low-maintenance thanks to LED technology
- Multiple accent light sources in one luminaire (1, 2, 3 or 4 LED modules)
- High lumen packages: up to 3900 lm per module (up to 3 head version)
- Rim version; rimless variant available; different RAL color combinations possible
- Ease of installation and maintenance (separate installation frame; replaceable LED light engines and reflectors)

Product size

All dimensions in millimeters



StoreFlux gen3 GD601-GD615B

StoreFlux gen3 GD601-GD615B



Technical parameters	
Type	GD601B (rim, 1 head version) GD602B (rim, 2 head version) GD603B (rim, 3 head version) GD604B (rim, 4 head in a row version) GD605B (rim, 4 head in a square version)
Light source	Non-replaceable LED module
Power (per head)	LED11S: 16.5 W LED12S: 12.5 W LED20S: 20 W LED17S: 16 W LED27S: 25 W LED39S: 39 W
Beam angle	LED12S/17S/27S/39S: 29 and 35° LED11S/20S: 10°
Luminous flux (at 3000 K)	LED11S: 1100 lm LED12S: 1200 lm LED20S: 2000 lm LED17S: 1700 lm LED27S: 2700 lm LED39S: 3900 lm
Correlated Color Temperature	2700, 3000 or 4000 K and CrispWhite
Color Rendering Index	80 90 (light color 930) >95 (CRW)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Driver failure rate	1% per 5000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	230 or 240 V / 50-60 Hz
Dimming	DALI
Material	Housing: aluminum, steel Front glass: acrylic
Color	White (WH-WH) Housing, heads and rim can have different color combinations (WHWH, BK-BK, GR-BK, WH-BK)
Optical cover	Acrylic
Connection	Push-in connector; 3-pole push-in with loop-through (CU3); 5-pole push-in with loop-through (CU5)
Cable options	0.5 m cable with 3-pole Wieland / Adels plug (CW); 0.5 m cable with 3-pole Wieland / Adels plug & lock (CW-L); 1m cable with external BST14 DALI connector (C1KBST2)
Maintenance	Replaceable light engines and driver
Installation	Fixation by means of spring fasteners
Remarks:	Optical unit tiltable over 30° 360° rotation of the optical unit





StoreFlux gen3 rimless

Powerful LED accent lighting that blends perfectly in the store architecture

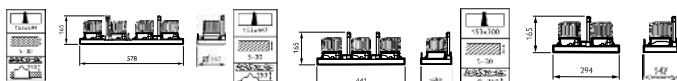
Features and Benefits

The StoreFlux gridlight can be equipped with up to four LED modules with a special reflector system to deliver top-quality light that makes your shop and merchandise look great. The combination of multiple LED sources with high lumen packages in one luminaire creates sparkling light effects. StoreFlux offers low maintenance compared with CDM and high efficiency compared to halogen.

- High-quality accent lighting thanks to PerfectAccent reflector's light signature
- Short payback compared with CDM luminaires due to high system efficacy
- Efficient and low-maintenance thanks to LED technology
- Multiple accent light sources in one luminaire (1, 2, 3 or 4 LED modules)
- High lumen packages: up to 3900 lm per module (up to 3 head version)
- Rim version; rimless variant available; different RAL color combinations possible
- Ease of installation and maintenance (separate installation frame; replaceable LED light engines and reflectors)

Product size

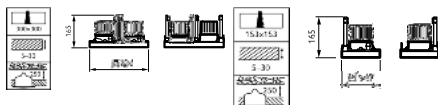
All dimensions in millimeters



StoreFlux gen3 GD601-GD615B

StoreFlux gen3 GD601-GD615B

StoreFlux gen3 GD601-GD615B



StoreFlux gen3 GD601-GD615B

StoreFlux gen3 GD601-GD615B



Technical parameters	
Type	GD611B (rimless, 1 head version) GD612B (rimless, 2 head version) GD613B (rimless, 3 head version) GD614B (rimless, 4 head in a row version) GD615B (rimless, 4 head in a square version)
Light source	Non-replaceable LED module
Power (per head)	LED11S: 16.5 W LED12S: 12.5 W LED20S: 20 W LED17S: 16 W LED27S: 25 W LED39S: 39 W
Beam angle	LED12S/17S/27S/39S: 29 and 35° LED11S/20S: 10°
Luminous flux (at 3000 K)	LED11S: 1100 lm LED12S: 1200 lm LED20S: 2000 lm LED17S: 1700 lm LED27S: 2700 lm LED39S: 3900 lm
Correlated Color Temperature	2700, 3000 or 4000 K and CrispWhite
Color Rendering Index	80 90 (light color 930) >95 (CRW)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Driver failure rate	1% per 5000 hours
Average ambient temperature	25 °C
Driver	Separate
Mains voltage	230 or 240 V / 50-60 Hz
Dimming	DALI
Material	Housing: aluminum, steel Front glass: acrylic
Color	White (WH-WH) Housing, heads and rim can have different color combinations (WHWH, BK-BK, GR-BK, WH-BK)
Optical cover	Acrylic
Connection	Push-in connector; 3-pole push-in with loop-through (CU3); 5-pole push-in with loop-through (CU5)
Cable options	0.5 m cable with 3-pole Wieland / Adels plug (CW); 0.5 m cable with 3-pole Wieland / Adels plug & lock (CW-L); 1m cable with external BST14 DALI connector (C1KBST2)
Maintenance	Replaceable light engines and driver
Installation	Directly into the ceiling after installing installation frame
Accessories	Installation frames (ZDS1*B CFRM-RML) to be ordered separately
Remarks:	Optical unit tiltable over 30° 360° rotation of the optical unit





Essential SmartBright LED Spot

High performance in a robust and compact design

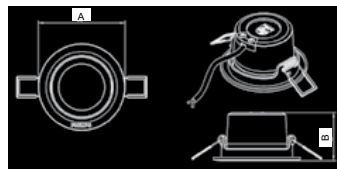
Philips Essential SmartBright LED Spot is a versatile spot light engineered to deliver significant energy savings of up to 70%. In addition, its all in one, slim design with integrated driver makes installation a breeze. Thus, its an ideal solution for diverse spot lighting applications. Essential SmartBright LED Spot is also designed to meet international standards and certifications, offering you reliable and long-lasting performance. Philips Essential SmartBright LED Spot not only ensures savings on initial capital, but also delivers reliable operational savings.

Features and Benefits

- System efficacy, Energy saving up to 70% vs conventional
- Reliable performance, Lifetime 15,000hours (L70B50@25°C)
- Excellent light quality, CRI>=80
- Slim design, makes installation way easier

Product size

All dimensions in millimeters



Type	A	B	Cut-out
RS022B LED2 73	37	65	
RS022B LED5 79	43	68	
RS022B LED8 89	49	78	



Technical parameters	
Model	RS022B
Lifetime	15k hrs (L70B50@25°C)
System Lumen Output	Typical. 200lm, 480lm, 780lm
Efficacy	66lm/W
CRI	80
CCT	3000K, 4000K
System Wattage	3W, 6W, 10W
Input Voltage	220-240 V/ 50-60 Hz
IP	IP20
IK	IK02
Operation temperature	-20°C – +40°C
Mounting	Recessed
Dimension(mm)	Cut-out: 65/68/78 Size: Ø73xH37, Ø79xH43, Ø89xH49



LuxSpace Accent

The best energy-efficient range for retail applications

HealWell system compatible

Retailers are increasingly having to contend with rising energy prices. At the same time, they need to retain the quality of light they are used to, flexibility in architectural integration, and the right light effects to catch the customer's eye. Last but not least, they need futureproof solutions that will enable them to implement differentiating concepts in their store. Delivering high-quality light, punch in the beam and outstanding luminous efficacy, LuxSpace Accent is the ideal energy-efficient solution for today's demanding retail environments, covering a wide variety of lighting applications, including CrispWhite and PremiumWhite for fashion stores and Food recipes for supermarkets.

Features and Benefits

- Attract shoppers with high-quality light
- Luminaire design blends discreetly into the store
- Good energy performance, matching CDM Elite while offering much longer lifetime and payback of the Total Cost of Ownership within three years
- Efficacy of up to 110 lm/W, thanks to very Hi-LOR reflectors (90%)
- Lumen packages from 1200 to 4900 lm to match equivalent CDM 20/35/50/70 W MASTERColour Elite
- Choice of color temperatures: 2700, 3000 and 4000K
- Color rendering index 80, 90 and 95
- Narrow, medium, wide, very wide and oval beams available
- Passive cooling in all versions of the range
- Dimmable versions
- Through-wiring options

Technical parameters

Type	RS730B (mini, fixed version) RS731B (mini, adjustable version) RS740B (compact, fixed version) RS741B (compact, adjustable version) RS750B (performance, fixed version) RS751B (performance, adjustable version) RS752B (performance, elbow version)
Light source	Non-replaceable LED module
Power	<ul style="list-style-type: none"> • Mini versions NB (LED11S): 15 to 18 W (depending on light color) MB, WB (LED12S): 12 to 16 W (depending on light color) • Compact versions NB (LED20S): 27 W MB, WB (LED17S): 16 to 20 W (depending on light color) MB, WB (LED27S): 25 to 32 W (depending on light color) MB, WB (LED39S): 39 W • Performance versions NB (LED40S): 55 W MB, WB, LIN (LED27S) (only in RS752B - elbow archetype): 24 to 31 W MB, WB, VWB, LIN (LED39S): 35 to 46 W (depending on light color) MB, WB, VWB, LIN (LED49S): 47 to 56 W (depending on light color)



up to 70klms

Technical parameters	
Beam angle	<ul style="list-style-type: none"> • Mini and compact versions NB (10°) MB (28°, ± 2 degrees depending on lumen package) WB (36°, ± 2 degrees depending on lumen package) LIN (oval lens) • Performance versions NB (15°) MB (21°, ± 2 degrees depending on lumen package) WB (30°, ± 2 degrees depending on lumen package) VWB (53°, ± 2 degrees depending on lumen package) VWB LIN (WB + oval lens) : 29 x 51° VWB LIN (VWB + oval lens) : 46 x 60°
Luminous flux	<ul style="list-style-type: none"> • Mini versions NB (LED11S): 1000 lm MB, WB (LED12S): 1200 lm • Compact versions NB (LED20S): 1600 to 2100 lm (depending on light color) MB, WB (LED17S): 1600 to 1800 lm (depending on light color) MB, WB (LED27S): 2500 to 2900 lm (depending on light color) MB, WB (LED39S): 3200 to 4200 lm • Performance versions NB (LED40S): 20,000 to 30,000 cd in the axis (depending on light color); 3000 to 3900 lm (depending on light color) MB, WB, LIN (LED27S) (only in RS752B - elbow archetype): 2500 to 2900 lm (depending on light color) MB, WB, VWB, LIN (LED39S): 3500 to 4000 lm (depending on light color) MB, WB, VWB, LIN (LED49S): 4300 to 4900 lm (depending on light color)
Light source color	827, 830, 840, 930
Correlated Color Temperature	2700, 3000 or 4000 K
Color Rendering Index	80, 90
Standard deviation color matching	3 (with a tolerance of ±0.005 on color point measurement)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Operating temperature range	10 to 40 °C
Driver failure rate	1% for 5000 hours
Average ambient temperature	25 °C
Driver	Built-in External
Mains voltage	230 or 240 V / 50-60 Hz
Dimming	Fix (PSE-E when DC compatible, PSU when NOT DC compatible) DALI (PSED-E when DC compatible, PSU when NOT DC compatible)
Material	Heatsink: die-cast aluminum Front cover: acrylic or glass Optic: plastic
Color	Black (BK, RAL9004) White (WH, RAL9003) Silver (SL, RAL 9006 metalized grey) Mini and Compact fixed versions only: aluminum brushed (ALU) Compact adjustable versions only: aluminum brushed - black or aluminum brushed - white (ALU-BK or ALU-WH, outer rim: brushed aluminum; inner front housing: black or white) Other RAL colors available on request
Optical cover	<ul style="list-style-type: none"> • Mini and compact versions Curved glass (for narrow beam) PMMA (for other beams) • Performance versions Clear with jaws (medium beam) Clear with diffuser foil (for other beams)
Connection	Push-in connector or with pull relief (PI) Wieland/Adels compatible connector with cable length 0.5m (CW)
Installation	Fixation by means of spring fasteners





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Accent light
LuxSpace Accent

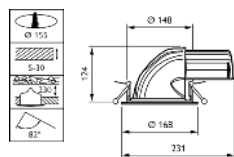
149

Accent light

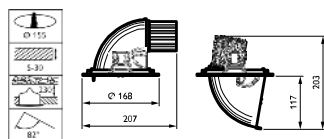


Product size

All dimensions in millimeters



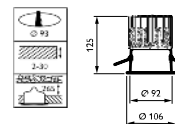
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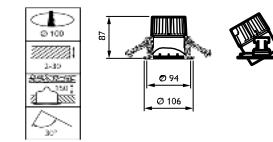
LuxSpace Accent

Product size

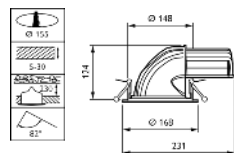
All dimensions in millimeters



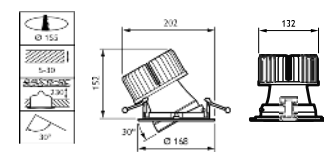
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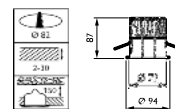
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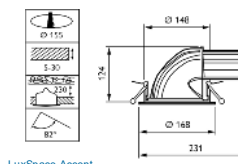
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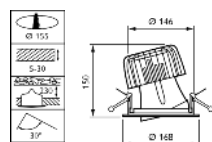
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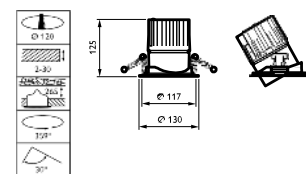
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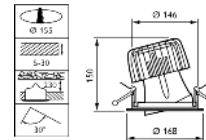
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LuxSpace Accent



LuxSpace Accent



LuxSpace Accent





لوفتهانزا العالمية المحدودة
Lufthansa International Limited

AIR GRILLS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

A02

RETURN AIR GRILLES
& REGISTERS

GGC

شركة الخليج لفتحات التكييف المركزي
GULF GRILLES CO.

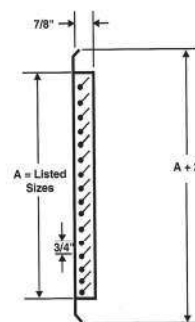


RETURN AIR GRILLES
& REGISTERS

جسي جي سي



RETURN AIR GRILLE
RETURN AIR GRILLE WITH HORIZONTAL
FIXED FACE BLADES.



PRODUCT DESCRIPTION

- Frame and blades are extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and is separated from the blades by an extruded rigid PVC track which becomes an integral part of the frame. This method of assembly helps to eliminate corrosion and vibration.
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- All blades are airfoil in design, set in a fixed position at an angle of 45° and spaced 3/4" on center.
- Standard finish is white, painted under electrostatic polyester powder coated system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.
- Suitable for high sidewall, exposed duct location, for heating and cooling applications.

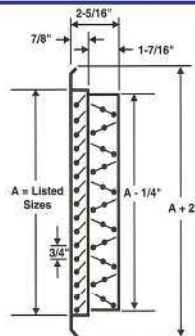
Listed Sizes

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
12 x 6	300 - 900	18 x 8	300 - 900
16 x 6	300 - 900	20 x 8	300 - 900
18 x 6	300 - 900	24 x 8	300 - 900
20 x 6	300 - 900	30 x 8	300 - 900
24 x 6	300 - 900	36 x 8	300 - 900
30 x 6	300 - 900	12 x 10	300 - 900
36 x 6	300 - 900	18 x 10	300 - 900
12 x 8	300 - 900	20 x 10	300 - 900
16 x 8	300 - 900	24 x 10	300 - 900

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
30 x 10	300 - 900	18 x 18	300 - 900
32 x 10	300 - 900	24 x 18	300 - 900
36 x 10	300 - 900	30 x 18	300 - 900
12 x 12	300 - 900	36 x 18	300 - 900
18 x 12	300 - 900	20 x 20	300 - 900
24 x 12	300 - 900	24 x 20	300 - 900
28 x 12	300 - 900	30 x 20	300 - 900
30 x 12	300 - 900	24 x 24	300 - 900
36 x 12	300 - 900	36 x 24	300 - 900



RETURN REGISTER
RETURN AIR GRILLE COMBINING HORIZONTAL FIXED
FACE BLADES WITH A VOLUME CONTROL DAMPER



PRODUCT DESCRIPTION

- Frame and blades are extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and is separated from the blades by an extruded rigid PVC track which becomes an integral part of the frame. This method of assembly helps to eliminate corrosion and vibration.
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- All blades are airfoil in design, set in a fixed position at an angle of 45° and spaced 3/4" on center.
- An opposed blade damper is attached for volume control of air in the return stream and is lever type operated through the face of the unit. The damper face is separated from the blades with PVC bushings eliminating corrosion and vibration.
- Standard finish is white color for frame and blades. Damper in black color. Painted under electrostatic polyester powder coated system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.
- Suitable for high sidewall, exposed duct location, for heating and cooling applications.

Listed Sizes

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
12 x 6	300 - 900	18 x 8	300 - 900
16 x 6	300 - 900	20 x 8	300 - 900
18 x 6	300 - 900	24 x 8	300 - 900
20 x 6	300 - 900	30 x 8	300 - 900
24 x 6	300 - 900	36 x 8	300 - 900
30 x 6	300 - 900	12 x 10	300 - 900
36 x 6	300 - 900	18 x 10	300 - 900
12 x 8	300 - 900	20 x 10	300 - 900
16 x 8	300 - 900	24 x 10	300 - 900

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
30 x 10	300 - 900	18 x 18	300 - 900
32 x 10	300 - 900	24 x 18	300 - 900
36 x 10	300 - 900	30 x 18	300 - 900
12 x 12	300 - 900	36 x 18	300 - 900
18 x 12	300 - 900	20 x 20	300 - 900
24 x 12	300 - 900	24 x 20	300 - 900
28 x 12	300 - 900	30 x 20	300 - 900
30 x 12	300 - 900	24 x 24	300 - 900
36 x 12	300 - 900	36 x 24	300 - 900



RETURN AIR GRILLE
RETURN AIR GRILLE WITH VERTICAL FIXED FACE BLADES.



PRODUCT DESCRIPTION

- Frame and blades are extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and is separated from the blades by an extruded rigid PVC track which becomes an integral part of the frame. This method of assembly helps to eliminate corrosion and vibration.
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- All blades are airfoil in design, set in a fixed position at an angle of 45° and spaced 3/4" on center.
- Standard finish is white, painted under electrostatic polyester powder coated system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.
- Suitable for high sidewall, exposed duct location, for heating and cooling applications.

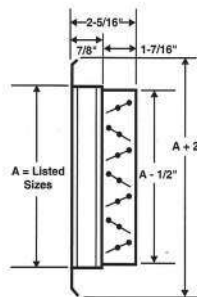
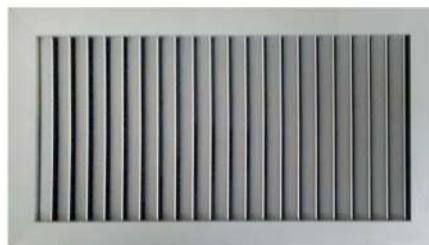
Listed Sizes

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
12 x 6	300 - 900	18 x 8	300 - 900
16 x 6	300 - 900	20 x 8	300 - 900
18 x 6	300 - 900	24 x 8	300 - 900
20 x 6	300 - 900	30 x 8	300 - 900
24 x 6	300 - 900	36 x 8	300 - 900
30 x 6	300 - 900	12 x 10	300 - 900
36 x 6	300 - 900	18 x 10	300 - 900
12 x 8	300 - 900	20 x 10	300 - 900
16 x 8	300 - 900	24 x 10	300 - 900

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
30 x 10	300 - 900	18 x 18	300 - 900
32 x 10	300 - 900	24 x 18	300 - 900
36 x 10	300 - 900	30 x 18	300 - 900
12 x 12	300 - 900	36 x 18	300 - 900
18 x 12	300 - 900	20 x 20	300 - 900
24 x 12	300 - 900	24 x 20	300 - 900
28 x 12	300 - 900	30 x 20	300 - 900
30 x 12	300 - 900	24 x 24	300 - 900
36 x 12	300 - 900	36 x 24	300 - 900



RETURN REGISTER
RETURN AIR GRILLE COMBINING VERTICAL
FIXED FACE BLADES WITH A VOLUME CONTROL DAMPER.



PRODUCT DESCRIPTION

- The frame and blades are extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and is separated from the blades by an extruded rigid PVC track which becomes an integral part of the frame. This method of assembly helps to eliminate corrosion and vibration.
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- All blades are airfoil in design, set in a fixed position at angle of 45° and spaced 3/4" on center.
- An opposed blade damper is attached for volume control of air in the return stream and is lever type operated through the face of the unit. The damper face is separated from the blades with PVC bushings eliminating corrosion and vibration.
- Standard finish is white color for frame and blades. Damper in black color. Painted under electrostatic polyester powder coated system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.
- Suitable for high sidewall, exposed duct location, for heating and cooling applications.

Listed Sizes

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
12 x 6	300 - 900	18 x 8	300 - 900
16 x 6	300 - 900	20 x 8	300 - 900
18 x 6	300 - 900	24 x 8	300 - 900
20 x 6	300 - 900	30 x 8	300 - 900
24 x 6	300 - 900	36 x 8	300 - 900
30 x 6	300 - 900	12 x 10	300 - 900
36 x 6	300 - 900	18 x 10	300 - 900
12 x 8	300 - 900	20 x 10	300 - 900
16 x 8	300 - 900	24 x 10	300 - 900

Dimensions			
Size (inches) W x H	Velocity (fpm)	Size (inches) W x H	Velocity (fpm)
30 x 10	300 - 900	18 x 18	300 - 900
32 x 10	300 - 900	24 x 18	300 - 900
36 x 10	300 - 900	30 x 18	300 - 900
12 x 12	300 - 900	36 x 18	300 - 900
18 x 12	300 - 900	20 x 20	300 - 900
24 x 12	300 - 900	24 x 20	300 - 900
28 x 12	300 - 900	30 x 20	300 - 900
30 x 12	300 - 900	24 x 24	300 - 900
36 x 12	300 - 900	36 x 24	300 - 900



**RETURN GRILLES AND REGISTERS
PERFORMANCE DATA**

**RETURN AIR GRILLE AND REGISTER
CAPACITY AND SELECTION CHART**

Listed Sizes (inches)	Face Velocity (fpm)	Static Pressure Drop (in. w.g.)										
		300	400	450	500	550	600	650	700	750	800	900
NC Level	Area factor (Ak) (Sq. ft.)	AIR CAPACITY (cfm)										
		0.008	0.015	0.019	0.023	0.028	0.032	0.038	0.044	0.050	0.056	0.071
12 x 6	.15	45	60	68	75	82	90	97	105	112	120	135
NC	-	<20	<20	<20	<20	<20	<20	<20	<20	21	24	27
16 x 6	.20	60	80	90	100	110	120	130	140	150	160	180
NC	-	<20	<20	<20	<20	<20	<20	21	22	24	25	28
18 x 6	.25	75	100	113	125	137	150	163	175	188	200	225
NC	-	<20	<20	<20	<20	<20	<20	22	23	24	26	29
20 x 6	.30	90	120	135	150	165	180	195	210	225	240	270
NC	-	<20	<20	<20	<20	<20	<20	22	24	25	27	30
24 x 6	.37	111	148	167	185	203	222	240	259	277	296	333
NC	-	<20	<20	<20	<20	<20	21	23	25	27	29	32
30 x 6	.45	135	180	203	225	247	270	292	315	338	360	406
NC	-	<20	<20	<20	<20	<20	21	23	25	27	29	32
36 x 6	.54	162	216	243	270	297	324	351	378	405	432	486
NC	-	<20	<20	<20	<20	21	23	25	27	29	31	34
12 x 8	.20	60	80	90	100	110	120	130	140	150	160	180
NC	-	<20	<20	<20	<20	<20	<20	20	22	24	25	28
16 x 8	.32	96	128	144	160	176	192	208	224	240	256	288
NC	-	<20	<20	<20	<20	<20	20	22	24	26	28	31
18 x 8	.37	111	148	167	185	203	222	240	259	277	296	333
NC	-	<20	<20	<20	<20	<20	21	23	25	27	29	32
20 x 8	.41	123	164	185	205	225	246	266	287	308	328	369
NC	-	<20	<20	<20	<20	<20	21	23	25	27	29	32
24 x 8	.50	150	200	225	250	275	300	325	350	375	400	450
NC	-	<20	<20	<20	<20	20	22	24	26	28	30	33
30 x 8	.60	180	240	270	300	330	360	390	420	450	480	540
NC	-	<20	<20	<20	<20	21	23	25	27	29	31	34
36 x 8	.74	222	296	333	370	407	444	481	519	555	592	666
NC	-	<20	<20	<20	<20	22	24	26	28	30	32	36
12 x 10	.30	90	120	135	150	165	180	195	210	225	240	270
NC	-	<20	<20	<20	<20	<20	<20	22	24	25	27	30
18 x 10	.44	132	176	198	220	242	264	286	308	330	352	396
NC	-	<20	<20	<20	<20	<20	21	24	26	27	29	32
20 x 10	.49	147	196	220	245	270	294	318	343	367	392	441
NC	-	<20	<20	<20	<20	20	22	24	26	28	30	33
24 x 10	.60	180	240	270	300	330	360	390	420	450	480	540
NC	-	<20	<20	<20	<20	21	23	25	27	29	31	34
30 x 10	.74	222	296	333	370	407	444	481	518	555	592	666
NC	-	<20	<20	<20	<20	22	24	26	28	30	32	36
32 x 10	.82	246	328	369	410	451	492	533	574	615	656	736
NC	-	<20	<20	<20	20	23	25	27	29	31	33	37
36 x 10	.92	276	368	414	460	506	552	596	644	690	736	828
NC	-	<20	<20	20	23	25	28	30	32	34	36	40
12x12	.37	111	148	167	185	203	222	240	259	277	296	333
NC	-	<20	<20	<20	<20	<20	21	23	25	27	29	32
18 x 12	.54	162	216	243	270	297	324	351	378	405	432	486
NC	-	<20	<20	<20	<20	21	23	25	27	29	31	34
24x12	.74	222	296	333	370	407	444	481	518	555	592	666
NC	-	<20	<20	<20	<20	22	24	26	28	30	32	36
28 x 12	.87	261	348	391	435	478	522	565	609	653	696	783
NC	-	<20	<20	<20	20	23	25	27	29	31	33	37
30 x 12	.92	276	368	414	460	506	552	598	644	690	736	828
NC	-	<20	<20	20	23	25	28	30	32	34	36	40
36 x 12	1.12	336	448	504	560	616	672	728	784	840	896	1008
NC	-	<20	<20	<20	21	24	26	29	31	32	34	38



**RETURN GRILLES AND REGISTERS
PERFORMANCE DATA**

**RETURN AIR GRILLE AND REGISTER
CAPACITY AND SELECTION CHART**

Listed Sizes (inches)	Face Velocity (fpm)	300	400	450	500	550	600	650	700	750	800	900
	Static Pressure Drop (in. w.g.)	0.008	0.015	0.019	0.023	0.028	0.032	0.036	0.044	0.050	0.056	0.071
NC Level	Area factor (A _k) (Sq. ft.)	AIR CAPACITY (cfm)										
16 x 16	.65	195	260	293	325	358	390	423	455	488	520	585
NC	-	<20	<20	<20	<20	22	24	26	28	30	32	36
18 x 18	.83	249	332	374	415	456	496	539	581	622	664	747
NC	-	<20	<20	<20	20	23	25	27	29	31	33	37
24 x 18	1.13	339	452	509	565	622	678	735	791	847	904	1017
NC	-	<20	<20	<20	21	23	26	28	31	32	34	38
30 x 18	1.40	420	560	630	700	770	840	910	980	1050	1120	1260
NC	-	<20	<20	20	23	25	28	30	32	34	36	40
36 x 18	1.71	513	684	770	855	940	1026	1111	1197	1282	1368	1539
NC	-	<20	<20	21	24	27	29	31	33	35	37	41
20 x 20	1.04	312	416	468	520	572	624	676	728	780	832	936
NC	-	<20	<20	20	21	24	26	28	30	32	34	38
24 x 20	1.27	381	508	572	635	699	762	825	889	952	1016	1143
NC	-	<20	<20	20	22	25	27	29	31	33	35	39
30 x 20	1.57	471	628	707	785	863	942	1020	1099	1177	1256	1413
NC	-	<20	<20	20	23	26	28	30	32	34	36	40
24 x 24	1.52	456	608	684	760	836	912	988	1064	1140	1216	1368
NC	-	<20	<20	21	23	26	28	30	32	34	36	40
36 x 24	2.29	687	916	1030	1145	1260	1374	1488	1603	1717	1832	2061
NC	-	<20	<20	23	25	28	30	32	34	36	38	42

Sizes other than shown are available :-

Performance data for 45° blade settings smaller than 45° the air capacity will increase.

Note :- Determine the CFM by the following equation.

$$CFM = \text{Area Factor} \times \text{Face Velocity.}$$

To calculate the approximate area factor of sizes not shown, use the following formula :

$$\text{Area Factor} = \frac{\text{Length} [0.375 + (N \times 0.3125)]}{144}$$

Where : Length = Nominal Width - 0.875 - (*Number of dividers x 0.625)

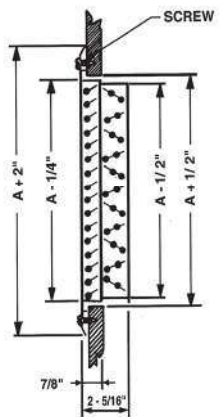
$$N = \frac{\text{Height} - 1.5}{0.75}$$

*Based upon dividers spaced every 12 inches.

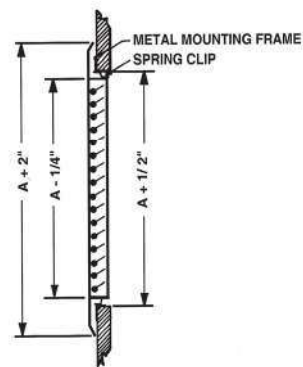
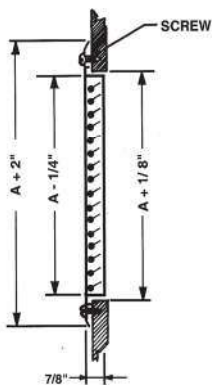
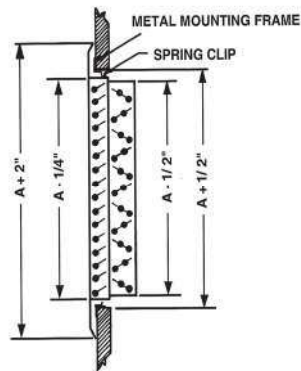


INSTALLATION DETAILS

FACE SCREW MOUNTING
(Wall & Ceiling Mounting)



SPRING CLIP MOUNTING
(Wall Mounting)



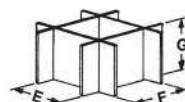
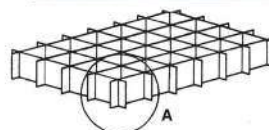
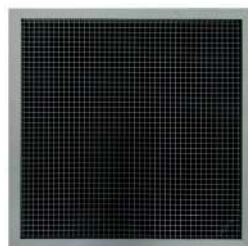
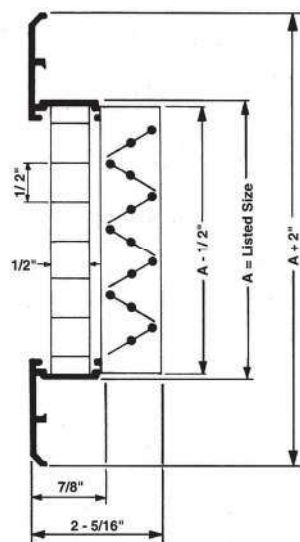
A - LISTED SIZES (W x H)



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

EC14-1D

EGG CRATE RETURN AIR GRILLE
EGG CRATE STYLE RETURN AIR GRILLE AND
VOLUME CONTROL DAMPER (1/2" x 1/2" x 1/2")



DETAIL - A

Listed Grid Size is ExFxG

Example : 1/2" x 1/2" x 1/2"

PRODUCT DESCRIPTION

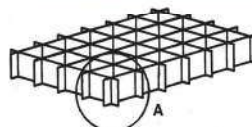
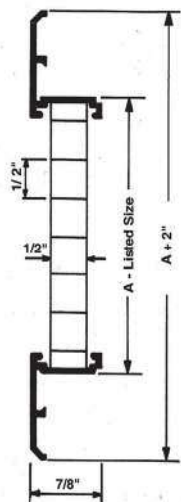
- Egg crate return grilles for use in ceiling or sidewall where a variety of bold crisp lines are desired with a free area of 90%.
- The aluminium egg crate style core has an opening of 1/2" x 1/2".
- Frame is extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and thickness of aluminium grid is 1/32".
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- The grille is fitted with an opposed blade volume control damper and is screw driver operated through the face of the unit.
- Standard finish for frame and core white color. Damper in black color. Painted under electrostatic polyester powder coating system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

EC141X EGG CRATE STYLE RETURN AIR GRILLE

($\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ ")



DETAIL - A

Listed Grid Size is ExFxG

Example : $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ "

PRODUCT DESCRIPTION

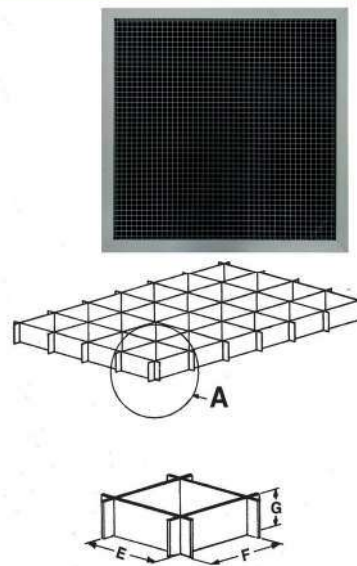
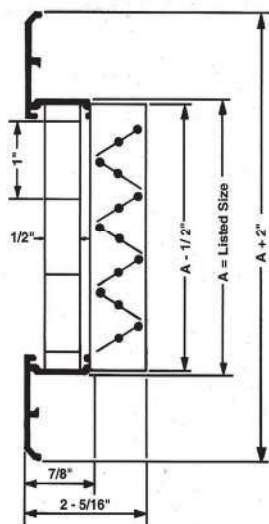
- Egg crate return grilles for use in ceiling or sidewall where a variety of bold crisp lines are desired with a free area of 90%.
- The aluminium egg crate style core has an opening of $\frac{1}{2}$ " x $\frac{1}{2}$ ".
- Frame is extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of $\frac{1}{16}$ " and thickness of aluminium grid is $\frac{1}{32}$ ".
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- Standard finish is white. Painted under electrostatic polyester powder coating system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

EC142D

EGG CRATE RETURN AIR GRILLE
EGG CRATE STYLE RETURN AIR GRILLE AND
VOLUME CONTROL DAMPER (1" x 1" x 1/2")



DETAIL - A

Listed Grid Size is ExFxG
Example :1" x 1" x 1/2"

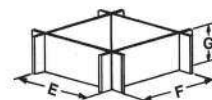
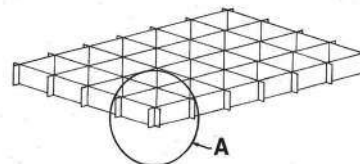
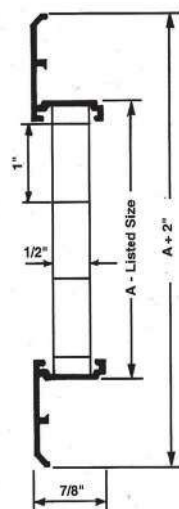
PRODUCT DESCRIPTION

- Egg crate return grilles for use in ceiling or sidewall where a variety of bold crisp lines are desired with a free area of 90%.
- The aluminium egg crate style core has an opening of 1" x 1".
- Frame is extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and thickness of aluminium grid is 1/32".
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- The grille is fitted with an opposed blade volume control damper and is screw driver operated through the face of the unit.
- Standard finish for frame and core white color. Damper in black color. Painted under electrostatic polyester powder coating system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.



EC142X EGG CRATE STYLE RETURN AIR GRILLE

EGG CRATE STYLE RETURN AIR GRILLE
(1"X1"X1/2")



DETAIL - A

Listed Grid Size is ExFxG

Example :1" x 1" x 1/2"

PRODUCT DESCRIPTION

- Egg crate return grilles for use in ceiling or sidewall where a variety of bold crisp lines are desired with a free area of 90%.
- The aluminium egg crate style core has an opening of 1" x 1".
- Frame is extruded aluminium alloy and are polyester powder coated with a white finish.
- The frame has a typical wall thickness of 1/16" and thickness of aluminium grid is 1/32".
- The frame mounting holes are dimpled, allowing for a counter-sunk fastener head appearance.
- Standard finish is white. Painted under electrostatic polyester powder coating system. Other colors available on request. The polyester powder of highest quality are used to enhance the appearance of the units.



**EGG CRATE STYLE RETURN AIR GRILLE
PERFORMANCE DATA**

Nominal Duct Size (inches)	Core Area (Sq. Ft.)	Core Velocity (fpm)	Velocity Pressure (in. w.g.)		300	400	500	600	700	800	1000	1200	1400
			Negative SP (in. w.g.)		.006	.010	.016	.022	.031	.040	.062	.090	.122
6 x 6	0.172		CFM		52	69	86	103	120	138	172	206	241
			NC		25	28	30	32	33	34	36	38	40
8 x 6	0.248		CFM		74	99	124	149	174	198	248	298	347
			NC		24	27	29	31	32	34	36	38	39
10 x 6	0.312		CFM		93	125	156	187	218	250	312	374	437
			NC		23	26	28	30	32	33	35	37	38
12 x 6	0.387		CFM		116	155	194	232	271	310	387	464	542
			NC		23	26	28	30	31	33	35	37	38
14 x 6	0.462		CFM		135	181	226	271	316	361	452	542	633
			NC		23	26	28	30	31	32	35	36	38
16 x 6	0.517		CFM		155	207	259	310	362	414	517	620	724
			NC		23	26	28	29	31	32	34	36	38
18 x 6	0.592		CFM		178	237	296	355	414	474	592	710	829
			NC		22	25	27	29	31	32	34	36	37
20 x 6	0.657		CFM		197	263	329	394	460	526	657	788	920
			NC		22	25	27	29	30	32	34	36	37
24 x 6	0.797		CFM		239	319	398	478	558	638	797	956	1116
			NC		22	24	27	28	30	31	33	35	37
28 x 6	0.936		CFM		281	374	468	562	655	749	936	1123	1310
			NC		21	24	26	28	30	31	33	35	36
32 x 6	1.066		CFM		320	426	533	640	746	853	1066	1279	1492
			NC		21	24	26	28	29	31	33	35	36
36 x 6	1.205		CFM		361	482	603	723	844	964	1205	1446	1687
			NC		21	24	26	28	29	30	33	34	36
40 x 6	1.345		CFM		404	538	673	807	942	1076	1345	1614	1883
			NC		21	23	26	27	29	30	32	34	36
48 x 6	1.625		CFM		487	650	813	975	1137	1300	1625	1950	2275
			NC		20	23	25	27	29	30	32	34	35
8 x 8	0.844		CFM		103	138	172	206	241	275	344	413	482
			NC		23	26	28	30	31	33	35	37	38
10 x 8	0.441		CFM		132	176	220	267	309	353	441	529	617
			NC		23	26	28	30	31	32	35	36	38
12 x 8	0.527		CFM		158	211	264	318	369	422	527	632	738
			NC		22	25	27	29	31	32	34	36	37
14 x 8	0.624		CFM		187	250	312	374	437	499	624	749	874
			NC		22	25	27	29	30	32	34	36	37
16 x 8	0.721		CFM		216	288	360	433	505	577	721	865	1009
			NC		22	24	27	28	30	31	33	35	37
18 x 8	0.818		CFM		245	327	409	491	573	654	818	982	1145
			NC		21	24	26	28	30	31	33	35	36
20 x 8	0.915		CFM		274	366	457	549	640	732	915	1098	1281
			NC		21	24	26	28	29	31	33	35	36
24 x 8	1.109		CFM		333	444	555	665	776	887	1109	1331	1557
			NC		21	24	26	28	29	30	33	34	36
28 x 8	1.302		CFM		391	521	651	781	911	1042	1302	1562	1823
			NC		21	23	26	27	29	30	32	34	36
32 x 8	1.485		CFM		445	594	743	891	1039	1188	1485	1782	2079
			NC		20	23	25	27	29	30	32	34	35
36 x 8	1.679		CFM		504	672	840	1007	1175	1343	1679	2015	2351
			NC		20	23	25	27	28	30	32	34	35
40 x 8	1.873		CFM		562	749	936	1123	1311	1498	1873	2248	2622
			NC		20	23	25	27	28	29	32	33	35



EGG CRATE STYLE RETURN AIR GRILLE
PERFORMANCE DATA

Nominal Duct Size (Inches)	Core Area (Sq. Ft.)	Core Velocity (fpm)											
		Velocity Pressure (in. w.g.)											
		300	400	500	600	700	800	1000	1200	1400			
		Negative SP (in. w.g.)											
		.066	.010	.016	.022	.031	.040	.062	.090	.122			
		.016	.026	.042	.059	.082	.106	.165	.236	.323			
48 x 8	2.250	CFM	675	900	1125	1350	1575	1800	2250	2700	3150		
		NC	19	22	24	26	28	29	31	33	34		
10 x 10	0.560	CFM	168	224	280	336	392	448	560	672	784		
		NC	22	25	27	29	31	32	34	36	37		
12 x 10	0.667	CFM	200	267	333	400	467	534	667	800	934		
		NC	22	25	27	29	30	32	34	36	37		
14 x 10	0.807	CFM	242	323	403	484	565	646	807	968	1130		
		NC	22	24	27	28	30	31	33	35	37		
16 x 10	0.926	CFM	278	370	463	556	648	741	926	1111	1296		
		NC	21	24	26	28	30	31	33	35	36		
18 x 10	1.054	CFM	316	422	527	632	738	843	1054	1265	1476		
		NC	31	34	36	38	39	41	43	45	46		
20 x 10	1.184	CFM	355	474	592	710	829	947	1184	1421	1658		
		NC	21	24	26	28	29	30	33	34	36		
24 x 10	1.421	CFM	426	568	710	853	995	1137	1421	1705	1989		
		NC	20	23	25	27	29	30	32	34	35		
28 x 10	1.658	CFM	497	663	829	995	1161	1326	1658	1990	2321		
		NC	20	23	25	27	28	30	32	34	35		
32 x 10	1.905	CFM	571	762	952	1143	1333	1524	1905	2286	2667		
		NC	20	23	25	27	28	30	32	34	35		
36 x 10	2.153	CFM	646	861	1076	1292	1507	1722	2153	2584	3014		
		NC	20	23	25	27	28	29	32	33	35		
40 x 10	2.400	CFM	720	960	1200	1440	1680	1920	2400	2880	3360		
		NC	<20	22	24	26	28	29	31	33	34		
48 x 10	2.685	CFM	865	1154	1442	1731	2019	2308	2885	3462	4039		
		NC	<20	22	24	26	27	29	31	32	34		
12 x 12	0.829	CFM	249	332	414	497	580	663	829	995	1161		
		NC	21	24	26	28	30	31	33	35	36		
14 x 12	0.979	CFM	294	392	489	587	685	783	979	1175	1371		
		NC	21	24	26	28	29	31	33	35	36		
16 x 12	1.130	CFM	339	452	565	678	791	904	1130	1356	1582		
		NC	21	24	26	28	29	30	33	34	36		
18 x 12	1.281	CFM	384	512	640	767	897	1025	1281	1537	1793		
		NC	21	23	26	27	29	30	32	34	36		
20 x 12	1.432	CFM	430	573	716	859	1002	1146	1432	1718	2005		
		NC	20	23	25	27	29	30	32	34	35		
24 x 12	1.733	CFM	520	693	866	1039	1213	1386	1733	2080	2426		
		NC	20	23	25	27	28	30	32	34	35		
28 x 12	2.034	CFM	610	814	1017	1220	1424	1627	2034	2441	2848		
		NC	20	23	25	27	28	29	32	33	35		
32 x 12	2.325	CFM	697	930	1162	1395	1627	1860	2325	2790	3255		
		NC	<20	22	24	26	28	29	31	33	34		
36 x 12	2.626	CFM	788	1050	1313	1575	1838	2100	2626	3151	3676		
		NC	<20	22	24	26	27	29	31	33	34		
40 x 12	2.928	CFM	878	1171	1464	1757	2050	2342	2928	3514	4099		
		NC	<20	22	24	26	27	29	31	32	34		
48 x 12	3.520	CFM	1056	1408	1760	2112	2464	2816	3520	4224	4928		
		NC	<20	21	24	25	27	28	30	32	34		
14 x 14	1.182	CFM	349	465	581	697	813	930	1162	1394	1627		
		NC	21	24	26	28	29	30	33	34	36		
16 x 14	1.335	CFM	400	534	667	801	934	1068	1335	1602	1869		
		NC	21	23	26	27	29	30	32	34	36		



**EGG CRATE STYLE RETURN AIR GRILLE
PERFORMANCE DATA**

Nominal Duct Size (Inches)	Core Area (Sq. Ft.)	Core Velocity (fpm)	Velocity Pressure (in. w.g.)									
			300	400	500	600	700	800	1000	1200	1400	
			0.096	.010	.016	.022	.031	.040	.062	.090	.122	
			0.16	.026	.042	.059	.082	.106	.185	.238	.323	
18 x 14	1.507	CFM	452	603	753	904	1055	1208	1507	1806	2110	
		NC	20	23	25	27	29	30	32	34	35	
20 x 14	1.679	CFM	504	672	839	1007	1175	1343	1679	2015	2351	
		NC	20	23	25	27	28	30	32	34	35	
24 x 14	2.034	CFM	610	814	1017	1220	1424	1627	2034	2441	2848	
		NC	20	23	25	27	28	29	32	33	35	
28 x 14	2.390	CFM	717	958	1195	1434	1673	1912	2390	2868	3346	
		NC	<20	22	24	26	28	29	31	33	34	
32 x 14	2.745	CFM	823	1098	1372	1647	1921	2196	2745	3294	3843	
		NC	<20	22	24	26	27	29	31	33	34	
36 x 14	3.100	CFM	930	1240	1550	1860	2170	2480	3100	3720	4340	
		NC	<20	22	24	26	27	29	31	32	34	
40 x 14	3.455	CFM	1036	1382	1727	2073	2418	2764	3455	4146	4837	
		NC	<20	21	24	25	27	28	30	32	34	
48 x 14	4.155	CFM	1246	1662	2077	2493	2908	3324	4155	4986	5817	
		NC	<20	21	23	25	27	28	30	32	33	
16 x 16	1.539	CFM	462	616	769	923	1077	1231	1539	1847	2155	
		NC	20	23	25	27	29	30	32	34	35	
18 x 16	1.733	CFM	520	693	866	1040	1213	1386	1733	2080	2426	
		NC	20	23	25	27	28	30	32	34	35	
20 x 16	1.948	CFM	584	779	974	1169	1364	1558	1948	2338	2727	
		NC	20	23	25	27	28	29	32	33	35	
24 x 16	2.346	CFM	704	938	1173	1408	1642	1877	2346	2815	3284	
		NC	<20	22	24	26	28	29	31	33	34	
28 x 16	2.755	CFM	828	1102	1377	1653	1928	2204	2755	3306	3857	
		NC	<20	22	24	26	27	29	31	33	34	
32 x 16	3.165	CFM	945	1266	1582	1899	2215	2532	3165	3798	4431	
		NC	<20	22	24	26	27	29	31	32	34	
36 x 16	3.574	CFM	1072	1430	1787	2144	2502	2859	3574	4289	5004	
		NC	<20	21	24	25	27	28	30	32	34	
40 x 16	3.972	CFM	1192	1589	1986	2383	2780	3178	3972	4766	5561	
		NC	<20	21	23	25	27	28	30	32	33	
48 x 16	4.790	CFM	1437	1916	2395	2874	3353	3832	4790	5748	6706	
		NC	<20	21	23	25	26	28	30	32	33	
18 x 18	1.870	CFM	591	788	985	1182	1379	1576	1970	2364	2758	
		NC	20	23	25	27	28	29	32	33	35	
20 x 18	2.196	CFM	659	878	1098	1318	1537	1757	2196	2635	3074	
		NC	<20	22	24	26	28	29	31	33	34	
24 x 18	2.659	CFM	798	1064	1330	1595	1861	2127	2659	3190	3723	
		NC	<20	22	24	26	27	29	31	33	34	
28 x 18	3.121	CFM	936	1248	1560	1873	2185	2497	3121	3745	4369	
		NC	<20	22	24	26	27	29	31	32	34	
32 x 18	3.584	CFM	1075	1434	1792	2150	2509	2867	3584	4301	5018	
		NC	<20	21	24	25	27	28	30	32	34	
36 x 18	4.047	CFM	1214	1619	2023	2428	2833	3238	4047	4856	5666	
		NC	<20	21	23	25	27	28	30	32	33	
40 x 18	4.499	CFM	1350	1800	2250	2700	3150	3600	4500	5400	6300	
		NC	<20	21	23	25	26	28	30	32	33	
48 x 18	5.425	CFM	1627	2170	2712	3255	3797	4340	5425	6510	7595	
		NC	<20	21	23	24	26	27	29	31	33	
20 x 20	2.454	CFM	736	982	1227	1472	1718	1963	2454	2945	3436	
		NC	<20	22	24	26	28	29	31	33	34	



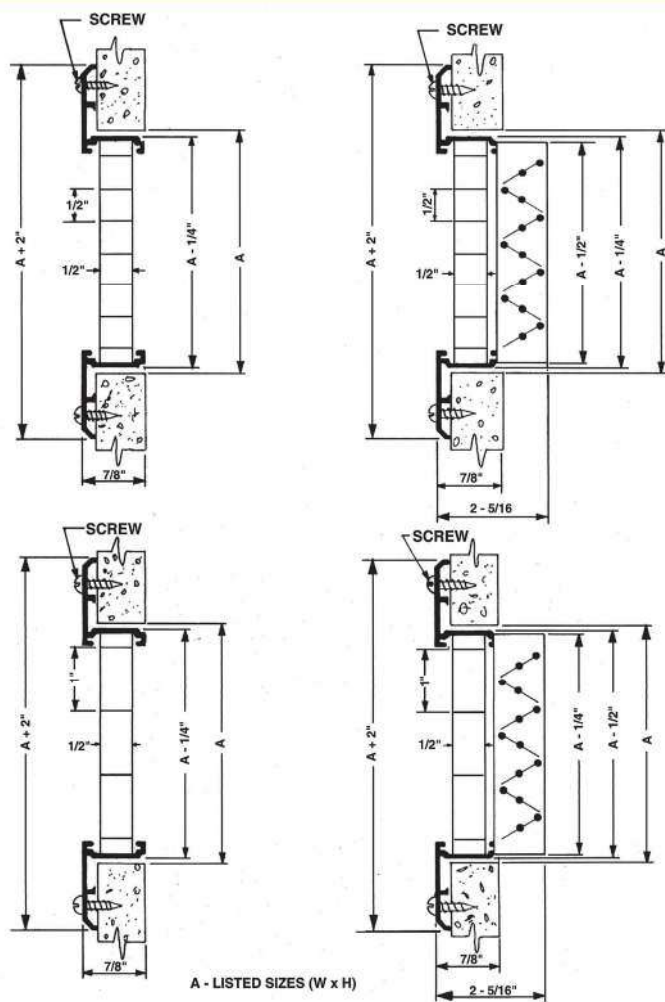
**EGG CRATE STYLE RETURN AIR GRILLE
PERFORMANCE DATA**

Nominal Duct Size (Inches)	Core Area (Sq. Ft.)	Core Velocity (fpm)	Velocity Pressure (in. w.g.)									
			300	400	500	600	700	800	1000	1200	1400	
			.068	.010	.016	.022	.031	.040	.062	.090	.122	
			.016	.026	.042	.059	.082	.106	.165	.238	.323	
24 x 20	2.971	CFM	891	1188	1485	1783	2078	2377	2971	3665	4159	
		NC	<20	22	24	26	27	29	31	32	34	
28 x 20	3.487	CFM	1046	1395	1743	2092	2441	2790	3467	4194	4682	
		NC	<20	21	23	25	27	28	30	32	33	
32 x 20	4.004	CFM	1201	1602	2002	2402	2803	3203	4004	4805	5605	
		NC	<20	21	23	25	27	28	30	32	33	
36 x 20	4.510	CFM	1353	1804	2255	2706	3157	3608	4510	5412	6314	
		NC	<20	21	23	25	26	28	30	32	33	
40 x 20	5.027	CFM	1508	2011	2513	3016	3519	4022	5027	6032	7038	
		NC	<20	21	23	24	26	27	29	31	33	
48 x 20	6.060	CFM	1818	2424	3030	3636	4242	4848	6060	7272	8484	
		NC	<20	20	22	24	26	27	29	31	33	
24 x 24	3.990	CFM	1078	1438	1797	2157	2516	2876	3595	4314	5033	
		NC	<20	21	24	25	27	28	30	32	34	
28 x 24	4.219	CFM	1266	1688	2109	2531	2953	3375	4219	5063	5907	
		NC	<20	21	23	25	27	28	30	32	33	
32 x 24	4.833	CFM	1450	1933	2416	2899	3383	3866	4833	5800	6766	
		NC	<20	21	23	25	26	28	30	32	33	
36 x 24	5.457	CFM	1637	2183	2728	3274	3820	4365	5457	6548	7640	
		NC	<20	21	23	24	26	27	29	31	33	
40 x 24	6.081	CFM	1824	2432	3040	3649	4257	4865	6081	7297	8513	
		NC	<20	20	22	24	26	27	29	31	33	
48 x 24	7.330	CFM	2199	2932	3665	4398	5131	5864	7330	8796	10,262	
		NC	<20	20	22	24	26	27	29	31	33	
28 x 28	4.941	CFM	1482	1976	2470	2965	3459	3953	4941	5929	6917	
		NC	<20	21	23	25	26	28	30	32	33	
32 x 28	5.672	CFM	1702	2269	2836	3403	3970	4638	5672	6806	7941	
		NC	<20	21	23	24	26	27	29	31	33	
36 x 28	6.404	CFM	1921	2582	3202	3842	4483	5123	6404	7685	8966	
		NC	<20	20	22	24	26	27	29	31	33	
40 x 28	7.136	CFM	2141	2854	3568	4282	4995	5709	7136	8563	9990	
		NC	<20	20	22	24	26	27	29	31	32	
48 x 28	8.589	CFM	2577	3436	4294	5153	6012	6871	8589	10,307	12,025	
		NC	<20	<20	21	23	25	27	29	31	32	
32 x 32	6.512	CFM	1964	2605	3256	3907	4558	5210	6512	7814	9117	
		NC	<20	20	22	24	26	27	29	31	32	
36 x 32	7.352	CFM	2206	2941	3676	4411	5146	5882	7352	8822	10,293	
		NC	<20	20	22	24	26	27	29	31	32	
40 x 32	8.191	CFM	2457	3276	4095	4914	5734	6553	8191	9829	11,467	
		NC	<20	<20	22	24	26	27	29	30	31	
48 x 32	9.859	CFM	2958	3943	4929	5915	6901	7887	9859	11,831	13,803	
		NC	<20	<20	22	24	26	27	29	30	31	
36 x 36	8.299	CFM	2490	3320	4150	4980	5810	6640	8300	9960	11,620	
		NC	<20	<20	21	23	25	27	29	31	32	
40 x 36	9.235	CFM	2770	3694	4618	5541	6464	7388	9235	11,020	12,929	
		NC	<20	<20	22	24	26	27	29	30	31	
48 x 36	11.130	CFM	3339	4452	5565	6678	7791	8904	11,130	13,356	15,582	
		NC	<20	<20	22	24	26	27	28	30	31	
40 x 40	10.290	CFM	3067	4116	5145	6174	7203	8232	10,290	12,348	14,406	
		NC	<20	<20	22	24	26	27	29	30	31	
48 x 40	12.400	CFM	3720	4960	6200	7440	8680	9920	12,400	14,880	17,350	
		NC	<20	<20	22	24	26	27	28	30	32	
48 x 48	14.929	CFM	4479	5972	7464	8957	10,450	11,943	14,929	17,915	20,900	
		NC	<20	<20	21	23	25	27	28	30	32	

● NC values are based on room absorption of 10dB, re 10⁻¹² Watts.



INSTALLATION DETAILS





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Lufthansa International Limited

ROOM THERMOSTAT



SIEMENS

3⁵⁶¹



Room Thermostat

RAA11

Tamperproof for heating only or cooling only

Two-position control
Switching voltage AC 24...250 V

Use

The RAA11 room thermostat is used in heating only or cooling only systems to maintain the selected room temperature where a tamperproof housing is needed.

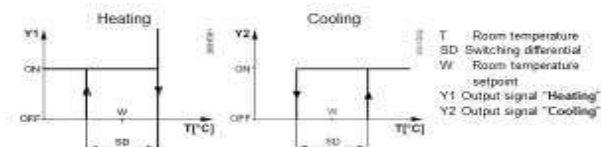
Typical use:

- Schools
- Public buildings
- Storage rooms
- Maintenance rooms

Functions

The RAA11 room thermostat has separate outputs for heating only and cooling only. If the room temperature falls below the selected setpoint, the heating contact will close. If the room temperature exceeds the selected setpoint, the cooling contact will close.

Function diagrams



Equipment combinations

Type of unit	Type reference	Data sheet ¹⁾
Motonic on/off actuator	SFA21...	4863
Thermal actuator (for radiator valve)	STA21...	4893
Thermal actuator (for small valve 2.5 mm)	STP21...	4878

¹⁾ The documents can be downloaded from <http://siemens.com/bt/download>.

Accessories

Description	Type reference
Adapter plate 120 x 120 mm for 4' x 4' conduit boxes	ARG70
Adapter plate 96 x 120 mm for 2' x 4' conduit boxes	ARG70.1
Adapter plate for surface wiring 112x130 mm	ARG70.2

Technical design

Key features of the RAA11 room thermostat:

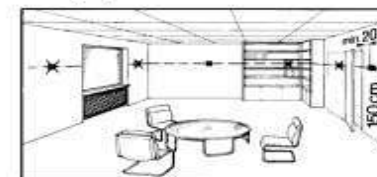
- Two-position control
- Gas-filled diaphragm
- No external adjustment facility

Notes

Mounting, installation and commissioning


The thermostat should be located where the air temperature can be sensed as accurately as possible, without getting adversely affected by direct solar radiation or other heat or refrigeration sources.

Mounting height is about 1.5 m above the floor.



The unit can be fitted to most commercially available recessed conduit boxes or directly on the wall.



 **AC 250 V**

Only authorised personnel may open the unit to perform service.
The unit must be isolated from the mains supply before opening.
When installing the unit, fix the baseplate first, then hook on the thermostat body and make the electrical connections. Then fit the cover and secure it also refer to separate mounting instructions.
The thermostat must be mounted on a flat wall.
The local electrical regulations must be complied with.
If there are thermostatic radiator valves in the reference room, set them to their fully open position.



Warning!
No internal line protection for supply lines to external consumers (Y1, Y2)
Risk of fire and injury due to short-circuits!
• Adapt the line diameters as per local regulations to the rated value of the installed overcurrent protection device.

**Maintenance
Mechanical design**

The room thermostat is maintenance-free.
The diaphragm is filled with environmentally friendly gas.
The thermostat housing is made of plastic.

Ordering

Type (ASN)	Part number (SSN)	Description
RAA11	S55770-T219	Room thermostat RAA11

Disposal



The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic waste.

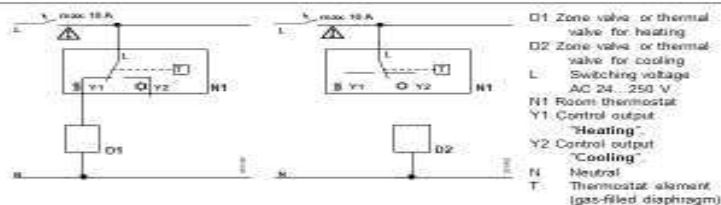
- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

Power supply	Switching capacity	AC 24...250 V
	Voltage	0.2...6(2.5) A
	Current	50 or 60 Hz
	Frequency	
Operational data	No internal fuse	External preliminary protection with max. C 10 A circuit breaker in the supply line required under all circumstances
	Screw terminals for	2 x 1.5 mm ² (min. 0.5 mm ²)
	Switching differential BD	≤ 1K
Environmental conditions	Setpoint setting range	6...30 °C
	Operation	to IEC 60721-3-3
	Climatic conditions	Class 3K5
	Temperature	0...+50 °C
	Humidity	<95 % r.h.
	Pollution degree	normal, to EN 60730-1
Industry standards	Transport / Storage	to IEC 60721-3-2
	Climatic conditions	Class 2K3/1K3
	Temperature	-20...+50 °C
	Humidity	<95 % r.h.
Environmental Compatibility	Mechanical conditions	Class 2M2
	EU conformity (CE)	800004301*
	UK conformity (UKCA)	A5W00209372A*
	RoM conformity	CE1T3561en_C1*
	The product environmental declaration CE1E3561* contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal)	
Safety standard	Degree of protection of housing	IP30 to EN 60529
	Weight	0.14 kg
	Colour	white, NCS S 0502-G (RAL 9003)
*) The documents can be downloaded from http://siemens.com/tdownload .		

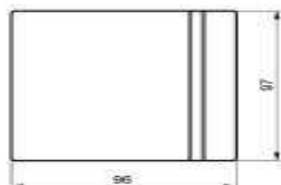


Connection diagrams

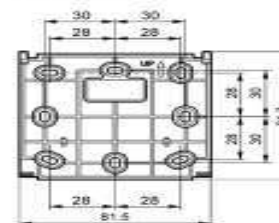


Dimensions

Room thermostat



Base plate



Remarks

Heating:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 3 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.

Cooling:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 1 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

SIEMENS

3⁵⁶²



Room thermostat

RAA21...

Adjustable for heating only or cooling only

- 2-position control
- Switching voltage AC 24...250 V

Use

The RAA21... room thermostat is used in heating only or cooling only systems to maintain the selected room temperature.

Typical use:

- Residential buildings
- Light industrial buildings

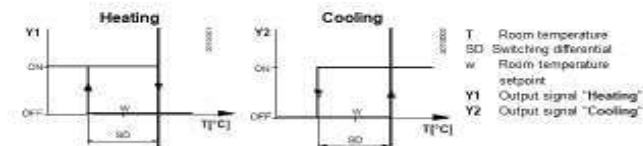
In conjunction with:

- zone valves or thermal valves
- gas or oil burners
- fans
- pumps

Functions

The RAA21... room thermostat has separate outputs for heating only and cooling only. If the room temperature falls below the selected setpoint, the heating contact will close. If the room temperature exceeds the selected setpoint, the cooling contact will close.

Function diagrams



Type summary

Functionality	Product no. (ASN)
Room thermostat for heating or cooling mode Switching voltage AC 24...250 V	RAA21

Equipment combinations

Description	Product no. (ASN)	Data sheet ¹⁾
Motronic on / off actuator	SFA21...	4863
Thermal actuator (for radiator valves)	STA21...	4893
Thermal actuator (for small valves 2.5 mm)	STP21...	4878

¹⁾The documents can be downloaded from <http://info.siemens.com/3562en/3562>

Accessories

Description	Product no. (ASN)
Adapter plate 120 x 120 mm for 4 x 4" conduit boxes	ARG70
Adapter plate 96 x 120 mm for 2 x 4" conduit boxes	ARG70.1
Adapter plate for surface wiring 112 x 130 mm	ARG70.2

Technical design

Key features of the RAA21... room thermostat:

- 2-position control
- Gas-filled diaphragm

Adjustments

The required temperature setpoint is selected with the setting knob on the front of the thermostat.

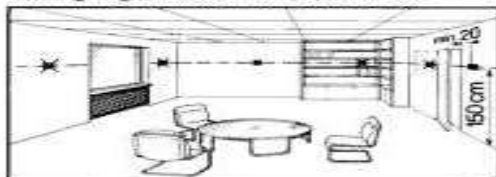
The setpoint setting range can be mechanically limited by means of setpoint limiters under the unit cover.



Installation
Dimensioning

The thermostat should be located where the room temperature can be acquired as accurately as possible, without getting adversely affected by direct solar radiation or other heat or refrigeration sources.

Mounting height is about 1.5 m above the floor.



The thermostat can be fitted to most commercially available recessed conduit boxes or directly on the wall.

Only authorized personnel may open the unit to perform service.

The unit must be isolated from the mains supply before opening.

When installing the unit, fix the base plate first, then hook on the thermostat body and make the electrical connections. Then, fit the cover and secure it (also refer to separate mounting instructions).

The thermostat must be mounted on a flat wall.

The local electrical regulations must be complied with.

If there are thermostatic radiator valves in the reference room, set them to their fully open position.

Warning!

No internal line protection for supply lines to external consumers (Y1, Y2)

Risk of fire and injury due to short-circuits!

- Adapt the line diameters as per local regulations to the rated value of the installed overcurrent protection device.

The room thermostat is maintenance-free.

The diaphragm is filled with environment-friendly gas.

The housing is made of plastic.

...250 V

...design

Type (ASN)	Part number (SSN)	Description
RAA21	S55770-T220	Room thermostat, RAA21

The devices are considered electronics devices for disposal in term of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

Power

Switching capacity:	AC 24...250 V
Voltage:	0.2...6(2.5) A
Current:	50 or 60 Hz
Frequency:	

No internal fuse
External preliminary protection with max. C 10 A circuit breaker in the supply line required under all circumstances

Screw terminals for: 2 x 1.5 mm² (min. 0.5 mm²)

Switching differential SD: ≤1 K

Operational data

Setpoint setting range: 8...30 °C

Environmental conditions

Operation: To IEC 60721-3-3

Climatic conditions: Class 3K5

Temperature: 0...50 °C

Humidity: <95% r.h.

Pollution degree: Normal, to EN 60730-1

Transport / storage: To IEC 60721-3-2

Climatic conditions: Class 2K3 / 1K3

Temperature: -20...50 °C

Humidity: <95% r.h.

Mechanical conditions: Class 2M2

Industry standards

EU conformity (CE): 800064801*

UK conformity (UKCA): A5W0(209372A)*

RCM conformity: CE1T3561en, C 1*

Safety standard: I to EN 60730-1

Degree of protection of housing: IP30 to EN 60529

Environmental compatibility

The product environmental declaration CE1E1661* contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Mechanical design

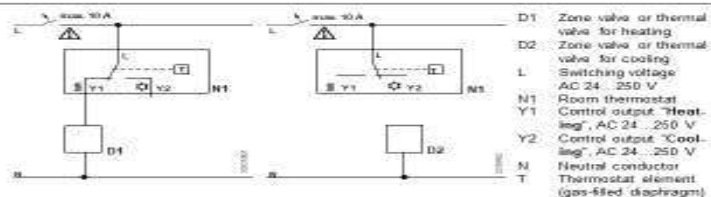
Weight: 0.14 kg (RAA21)

Color: White, NCS S 0502-G (RAL 9003)

* The documents can be downloaded from <http://siemens.com/sustainability>.

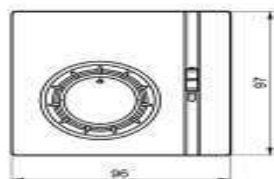


Connection diagrams

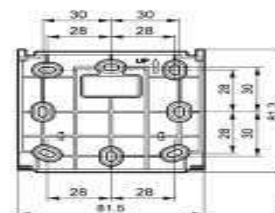


Dimensions

Room thermostat



Base plate



Remarks

Heating:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 3 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.

Cooling:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 1 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.



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TOILET SEAT

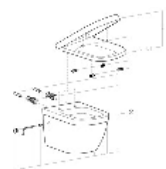


لوفتهانزا العالمية المحدودة
Lufthansa International Limited

*Pure Freude
an Wasser*



**39 205 000 EUROSART WALL HUNG
WC**



UNITS PER PACKAGE : June 2015 – now
1: WC seat and lid (Order-nr. 49506000)
1.1: Shock absorber (Order-nr. 4952000M)
2: Fixing set (Order-nr. 49511000)



لوفتهانزا العالمية المحدودة
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TOILET SEAT TANK



لوفتهانزا العالمية المحدودة
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GROHE INSTALLATION SYSTEMS





لوفتهانزا العالمية المحدودة
Lufthansa International Limited



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INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GROHE RAPID SLX



INSTALLATION
SYSTEMS



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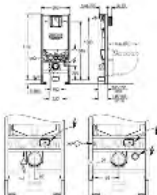
GROHE RAPID SLX

Ref. No.	Colour	EAN code	Retail Guide Price (E)
39 596 000		4005176527494	333.00
<p>Rapid SLX Element for WC, 1.13 m installation height with integrated socket and shower toilet connection with flushing cistern GD 2, 6 l - 2.6 l with integrated power socket ready for shower toilets (water) small revision shaft for small flush plates for on-the-wall installations or studded walls powder coated steel frame, self-supporting for dry-cladding, completely pre-assembled with fixed connections quick adjustment, lockable fixing material TÜV approved 2 WC fixing bolts fixing device for ceramic distance of fixing bolts 180/230 mm outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set flushing cistern GD 2, 3 - 6 l, containing following features: factory set 6 l and 3 l pneumatic discharge valve offering 2 modes of operation: dual flush or single flush water supply from right, back or top low noise (group 1 acc. to German Noise Specification) fully insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union no tools required for the installation of the inspection shaft incl. protection during construction phase for vertical use</p> <p>including flow manager reduces flow of the flush prevents overspill in rimless toilets easy flow regulation via inspection shaft without removing the valves for on-the-wall installation please order wall brackets 38 558 00M (sold separately) for mounting of flush plates 156 x 197 mm please order revision shaft 66 791 000 (sold separately)</p>			
39 603 000	Chrome	4005176527562	391.00
<p>Rapid SLX 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SLX element for WC (39 596 000) with integrated power socket Skate Cosmopolitan S flush plate, chrome (37 535 000) Rapid SL front wall brackets (38 558 00M) including flow manager</p>			



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GROHE RAPID SLX

Ref. No.	Colour	EAN code	Retail Guide Price (E)
39 598 000		4005176527517	350.00
			
			
<p>Rapid SLX 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SLX element for WC (39 596 000) with integrated power socket Rapid SL front wall brackets (38 558 00M) WC set for noise protection (37 131 000) including flow manager</p>			

INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
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GROHE RAPID SL FOR WC


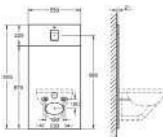

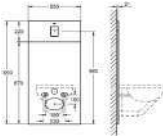


INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (€)
39 374 KS0	velvet black	4005176344770	698.17
		<p>Glass Cover Skate Cosmopolitan for Rapid SL 1.13 m with flushing cistern GD 2 for connecting shower toilet Sensia Arena or common wall-hung WCs for tiled/plastered walls two-piece glass cover made of tempered safety glass (8 mm) upper part removable for maintenance flush plate Skate Cosmopolitan, chrome, flush plate is kept flush with glass cover HPL mounting plate with hole pattern for all connections mounting plate with concealed water connection for shower toilet Sensia Arena mounting plate with with quality edges in silver finish Set for noise protection including accessory for mounting glass plate and WC ceramic</p>	
39 374 LS0	moon white	4005176344787	698.17
		<p>Glass Cover Skate Cosmopolitan for Rapid SL 1.13 m with flushing cistern GD 2 for connecting shower toilet Sensia Arena or common wall-hung WCs for tiled/plastered walls two-piece glass cover made of tempered safety glass (8 mm) upper part removable for maintenance flush plate Skate Cosmopolitan, chrome, flush plate is kept flush with glass cover HPL mounting plate with hole pattern for all connections mounting plate with concealed water connection for shower toilet Sensia Arena mounting plate with with quality edges in silver finish Set for noise protection including accessory for mounting glass plate and WC ceramic</p>	

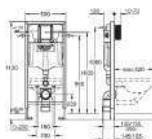


GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (E)
38 528 001		4005178863943	286.47

Rapid SL
Element for WC, 1.13 m installation height
with flushing cistern GD 2, 6 l - 2.6 l
for on-the-wall installations or studded walls
powder coated steel frame, self-supporting
TUV approved
2 WC fixing bolts
fixing device for ceramic
WC ceramics with small bearing area (< 205 mm) require
additional accessory 38 779 000
distance of fixing bolts 180/230 mm
outlet bend Ø 90 mm
depth adjustable
reducer Ø 90/110 mm
inlet and outlet connecting set
flushing cistern GD 2, 6 - 9 l, containing following features:
water supply from left/right or back
insulated against condensation
1/2" water supply connection including integrated
angle valve and push fit flexible hose union


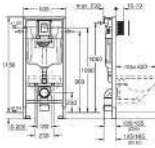

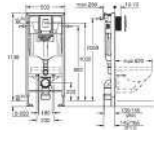

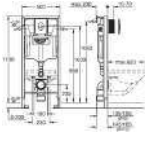

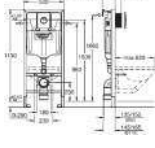
for on-the-wall installation please order wall brackets 38 558 00M (sold separately)
for mounting of small flush plates please order
revision shaft 40 911 000 (sold separately)



INSTALLATION
SYSTEMS

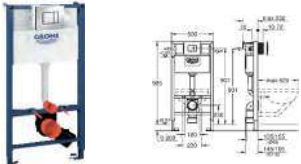
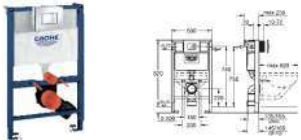
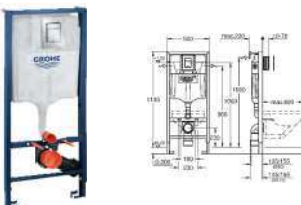
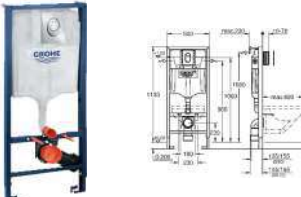


GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (E)
39 500 000	Chrome	4005176453861	264.57
		<p>Rapid SL 5-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Cosmopolitan S flush plate, chrome (37 535 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M) WC set for noise protection (37 131 000)</p>	
38 827 000	Chrome	4005176870477	419.21
		<p>Rapid SL 5-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Cosmopolitan flush plate, chrome (38 732 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M) including WC set for noise protection (37 131 000)</p>	
38 750 001	Chrome	4005176863363	398.20
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Air flush plate, chrome, vertical installation (38 505 000) Rapid SL front wall brackets (38 558 00M) including WC set for noise protection (37 131 000)</p>	
38 860 000	Chrome	4005176878084	374.99
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Nova Cosmopolitan flush plate, chrome (38 765 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M)</p>	



GROHE RAPID SL FOR WC


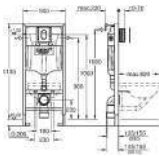

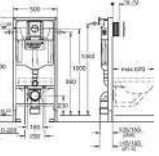

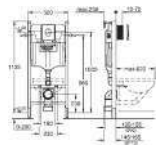

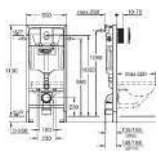
Ref. No.	Colour	EAN code	Retail Guide Price (E)
38 888 000	Chrome	4005176879630	430.26
 <p>Rapid SL 4-in-1 set for WC, 1.00 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 525 001) Skate Cosmopolitan flush plate, chrome (38 732 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M)</p>			
38 885 000	Chrome	4005176879609	419.19
 <p>Rapid SL 4-in-1 set for WC, 0.82 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 526 000) Skate Cosmopolitan flush plate, chrome (38 732 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M)</p>			
39 501 000	Chrome	4005176453878	372.74
 <p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Cosmopolitan S flush plate, chrome (37 535 000) Rapid SL front wall brackets (38 558 00M) including revision shaft 40 911 000 for mounting of small flush plates</p>			
39 503 000	Chrome	4005176454097	372.70
 <p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Air S flush plate, chrome, vertical installation (37 965 000) Rapid SL front wall brackets (38 558 00M)</p>			

INSTALLATION
SYSTEMS




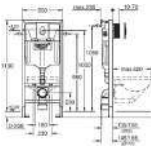

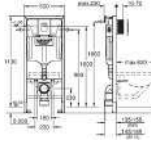




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Lufthansa International Limited

GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (E)
39 504 000	Chrome	4005176454103	372.74
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height flushing cistern GD 2, 6 - 3 l Consisting of: Rapid SL element for WC (38 528 001) Arena Cosmopolitan 5 flush plate, chrome (37 624 000) Rapid SL front wall brackets (38 558 00M) including revision shaft 40 911 000 for mounting of small flush plates</p>	
39 581 000	Chrome	4005176496011	372.74
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Nova Cosmopolitan 5 flush plate, chrome (37 601 000) GROHE Fresh retro-fit set (38 795 000) Rapid SL front wall brackets (38 558 00M)</p>	
38 719 001	alpine white	4005176863448	214.00
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 840 000) Skate Air flush plate, alpine white, vertical installation (38 505 SH0) Rapid SL front wall brackets (38 558 00M) including adapter 38 338 000</p>	
38 721 001	Chrome	4005176863431	359.00
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Air flush plate, chrome, vertical installation (38 505 000) Rapid SL front wall brackets (38 558 00M)</p>	



GROHE RAPID SL FOR WC


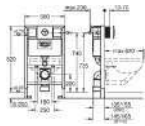

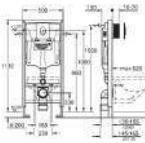

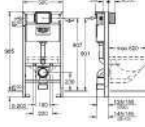

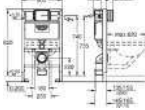
Ref. No.	Colour	EAN code	Retail Guide Price (E)
38 722 001	alpine white	4005176863424	343.00
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Air flush plate, alpine white, vertical installation (38 505 SH0) Rapid SL front wall brackets (38 538 00W)</p>	
38 772 001	Chrome	4005176863288	374.97
		<p>Rapid SL 3-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Cosmopolitan flush plate, chrome (38 732 000) Rapid SL front wall brackets (38 538 00W)</p>	
38 761 000	Chrome	4005176841620	397.09
		<p>Rapid SL 3-in-1 set for WC, 0.82 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 526 000) Skate Air flush plate, chrome, horizontal installation (38 506 000) Rapid SL front wall brackets (38 538 00W)</p>	
38 773 000	Chrome	4005176850288	397.10
		<p>Rapid SL 3-in-1 set for WC, 0.82 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 526 000) Skate Cosmopolitan flush plate, chrome (38 732 000) Rapid SL front wall brackets (38 538 00W)</p>	

INSTALLATION
SYSTEMS




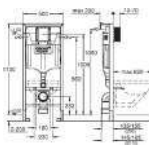

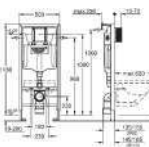
لوفتهانزا العالمية المحدودة
Lufthansa International Limited

GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (E)
38 868 000	Chrome	4005176878091	397.09
		<p>Rapid SL 3-in-1 set for WC, 0.82 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 526 000) Nova Cosmopolitan flush plate, chrome (38 765 000) Rapid SL front wall brackets (38 558 00M)</p>	
38 764 001	alpine white	4005176863301	238.92
		<p>Rapid SL 2-in-1 set for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l Consisting of: Rapid SL element for WC (38 528 001) Skate Air flush plate, alpine white, vertical installation (38 505 SH0)</p>	
38 947 000		4005176911217	379.00
		<p>Rapid SL 2-in-1 set for WC, 1.00 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 525 001) Rapid SL front wall brackets (38 558 00M)</p>	
38 948 000		4005176911224	374.99
		<p>Rapid SL 2-in-1 set for WC, 0.82 m installation height with flushing cistern 6 - 3 l Consisting of: Rapid SL element for WC (38 526 000) Rapid SL front wall brackets (38 558 00M)</p>	




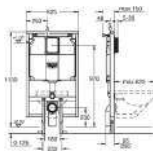

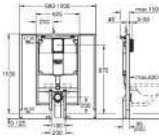

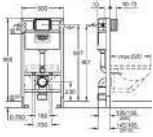
GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 536 001		4005176863929	308.58
		<p>Rapid SL Element for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l for on-the-wall installations or studded walls powder coated steel frame, self-supporting with fixed connections TUV approved 2 WC fixing bolts fixing device for ceramic WC ceramics with small bearing area (< 205 mm) require additional accessory 38 779 000 distance of fixing bolts 180/230 mm outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set flushing cistern GD 2, 6 - 9 l, containing following features: water supply from left/right or back 1/2" water supply connection including integrated angle valve and push fit flexible hose union</p> <p>Including wall brackets 38 558 00M for on-the-wall installation for mounting of small flush plates please order revision shaft 40 911 000 (sold separately)</p>	
38 539 001		4005176863912	240.04
		<p>Rapid SL Element for WC, 1.13 m installation height with flushing cistern GD 2, 6 l - 2.6 l for on-the-wall installations or studded walls powder coated steel frame, self-supporting for dry-cladding, completely pre-assembled with fixed connections quick adjustment, lockable fixing material TUV approved 2 WC fixing bolts fixing device for ceramic WC ceramics with small bearing area (< 205 mm) require additional accessory 38 779 000 distance of fixing bolts 180/230 mm outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set flushing cistern GD 2, 6 - 9 l, containing following features: factory set 6 l and 3 l pneumatic discharge valve offering 2 modes of operation: dual flush or single flush water supply from left/right or back low noise (group 1 acc. to German Noise Specification) Insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union no tools required for the installation of the inspection shaft incl. protection during construction phase inspection shaft for vertical or horizontal use allows for flush plate to be installed vertically or horizontally.</p> <p>Including wall brackets 38 558 00M for on-the-wall installation including WC set for noise protection (37 131 000) for mounting of small flush plates please order revision shaft 40 911 000 (sold separately)</p>	

INSTALLATION SYSTEMS



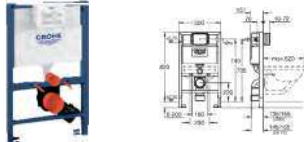



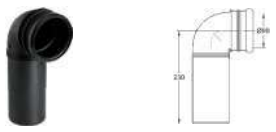
GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 994 000		4005176932335	352.85
		<p>Rapid SL Element for WC with flushing cistern 80 mm, 1.13 m installation height element width 0.62 m for small, narrow bathrooms for on-the-wall installations or studded walls powder coated steel frame, self-supporting with fixed connections TUV approved 2 WC fixing bolts fixing device for ceramic distance of fixing bolts 180/230 mm PP outlet bend Ø 90 mm depth adjustable PP-reducer Ø 90/110 mm inlet and outlet connecting set</p> <p>flushing cistern 80 mm, 6 - 9 l, containing following features: water supply from top or back water supply 1/2" and push fit flexible hose union</p> <p>including wall brackets 38 558 00M for on-the-wall installation for mounting of small flush plates please order revision shaft 40 949 000 (sold separately)</p>	
38 995 000		4005176932342	363.92
		<p>Rapid SL Element for WC with flushing cistern 80 mm, variable width 1.13 m finished installation height for small, narrow bathrooms variable element width 0.70 - 1.20 m for on-the-wall installation powder coated steel frame, self-supporting with fixed connections TUV approved 2 WC fixing bolts fixing device for ceramic distance of fixing bolts 180/230 mm PP outlet bend Ø 90 mm depth adjustable PP-reducer Ø 90/110 mm inlet and outlet connecting set</p> <p>flushing cistern 80 mm, 6 - 9 l, containing following features: water supply from top water supply 1/2" and push fit flexible hose union</p> <p>including wall brackets 38 558 00M for on-the-wall installation</p>	
38 525 001		4005176863967	352.86
		<p>Rapid SL Element for WC, 1.00 m installation height with flushing cistern 6 - 3 l for on-the-wall installations or studded walls powder coated steel frame, self-supporting TUV approved 2 WC fixing bolts fixing device for ceramic WC ceramics with small bearing area (< 205 mm) require additional accessory 38 779 000 distance of fixing bolts 180/230 mm outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set</p> <p>flushing cistern 6 - 9 l containing the following features: water supply from left/right or back insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union</p> <p>for on-the-wall installation please order wall brackets 38 558 00M (sold separately) for mounting of small flush plates please order revision shaft 40 950 000 (sold separately)</p>	

INSTALLATION
SYSTEMS



GROHE RAPID SL FOR WC

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 526 000		4005176291050	352.86
 <p>Rapid SL Element for WC, 0.82 m installation height with flushing cistern 6 - 3 l for on-the-wall installations or studded walls powder coated steel frame, self-supporting TUV approved 2 WC fixing bolts fixing device for ceramic distance of fixing bolts 180/230 mm PP-outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set</p> <p>flushing cistern 6 - 9 l containing the following features: water supply from left/right or back insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union</p> <p>for on-the-wall installation please order wall brackets 38 559 00M (sold separately) for mounting of small flush plates please order revision shaft 40 950 000 (sold separately)</p>			
40 899 000		4005176413896	38.72
 <p>Retrofit kit for shower toilets Sensia Arena and IGS retrofit of existing Rapid SL installations to shower toilets Sensia Arena or IGS including: conduit pipe with locking ring and flat seal cable ties WC connecting pipe Ø 45 mm waste sleeve Ø 90 mm</p>			
4005176291418			
			
42 333 000		4005176845888	14.59
 <p>4.5 l adapter for GD2 to reduce the maximum flush volume to 4.5 liters suitable for all elements with flushing cistern GD 2</p>			
42 327 000		4005176838705	12.49
 <p>PP-outlet bend Ø 90 mm variable depth adjustment</p>			



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GROHE RAPID SL FOR WC



Ref. No.	Colour	EAN code	Retail Guide Price (E)
42 946 000		4005176153655	30.17

Elbow
made of PE
Ø 80/100 mm

INSTALLATION
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Lufthansa International Limited






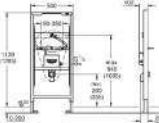
GROHE RAPID SL FOR URINAL



INSTALLATION
SYSTEMS



GROHE RAPID SL FOR URINAL

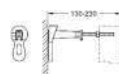
Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 786 001		4005176864025	319.00
		<p>Rapid SL Element for urinal with GROHE Rapido U 1.13 and 1.30 m installation height for manual actuation or Tectron infra-red electronic 6 V or 230 V for on-the-wall installations or studded walls height adjustable fitting connections HT-outlet bend Ø 50 mm fixing bolts M8, with fixing device for the ceramic inlet connection and inlet connecting set water group with stop valve flow pressure min 0.5 bar operating pressure max 10 bar flush aid functional unit checked ex factory water supply connections 1/2" outer thread connecting box for mains supply 230 V installation box with gasket inspection shaft incl. protection during construction phase for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>	
38 803 001		4005176864049	334.04
		<p>Rapid SL Element for urinal with infra-red electronic with GROHE Rapido U 1.13 and 1.30 m installation height for manual actuation or Tectron infra-red electronic 6 V or 230 V for on-the-wall installations or studded walls powder coated steel frame, self-supporting for dry-cladding, completely pre-assembled height adjustable fitting connections quick adjustment, lockable fixing material TLV approved HT-outlet bend Ø 50 mm inlet connection and inlet connecting set fixing bolts M8, with fixing device for the ceramic water group with stop valve flow pressure min 0.5 bar operating pressure max 10 bar flush aid functional unit checked ex factory water supply connections 1/2" outer thread connecting box for mains supply 230 V installation box with gasket inspection shaft incl. protection during construction phase including wall brackets 38 558 00M for on-the-wall installation</p>	
39 376 000		4005176342998	235.65
		<p>Rapid SL Element for urinal with temperature sensor with roughing-in set for T sensor 1.13 and 1.30 m installation height for on-the-wall installations or studded walls height adjustable fitting connections HT-outlet bend Ø 50 mm fixing bolts M8, with fixing device for the ceramic inlet connection and inlet connecting set box for concealed installation including roughing-in box water group with stop valve and flush elbow for T sensor electronic please order installation set 39 368 000 or 39 369 000 (sold separately) for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>	



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GROHE RAPID SL FOR URINAL

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 558 00M		4005176291418	26.41



Rapid SL
Front wall brackets
for against-the-wall installations
for fixing the elements at the brick-wall
or in front of the studded wall
adjustment from 130 - 230 mm
2 pieces

INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited


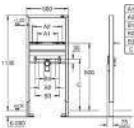

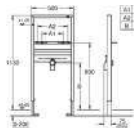

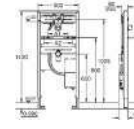

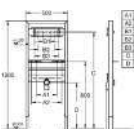
GROHE RAPID SL FOR WASH BASIN AND BIDET



INSTALLATION
SYSTEMS

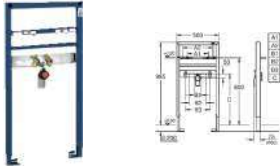
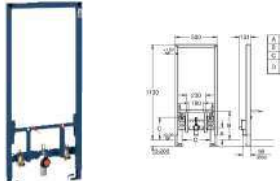
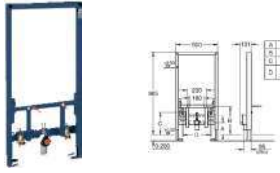
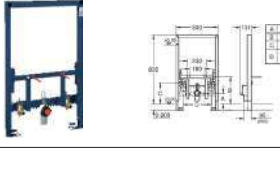



GROHE RAPID SL FOR WASH BASIN AND BIDET

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 554 001		4005176863806	131.62
		<p>Includes: A11 109-292 A2 20-442 B1 109-90 B2 102-290 B3 109-290 B4 26-016</p>	<p>Rapid SL Element for wash basin, single hole installation with noise protection 1.13 m finished installation height for on-the-wall installations or studded walls Includes wash basin fixing bolts with fixing device for ceramic variable distance of fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm 2 noise protected fitting connections 1/2" for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>
38 557 001		4005176863783	116.13
		<p>Includes: A11 129-190 A2 30-442 B1 129-190 B2 32-161</p>	<p>Rapid SL Element for wash basin, single hole installation 1.13 m finished installation height for on-the-wall installations or studded walls powder coated steel frame, self-supporting for dry-cladding, completely pre-assembled with fixed connections quick adjustment, lockable fixing material TÜV approved Includes wash basin fixing bolts with fixing device for ceramic variable distance of fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>
38 748 002	Chrome	4005176416323	495.97
		<p>Includes: A11 109-292 A2 30-442 B1 109-292 B2 30-442 B3 109-292 B4 26-016</p>	<p>Rapid SL Element for wash basin with rough-in set for infra-red electronic for wall mounted fittings suitable for trim sets Europlus E 36 042 SDO, Essence E 36 447 000 and Eurocube E 36 442 000 1.13 m finished installation height for on-the-wall installations or studded walls Includes wash basin fixing bolts with fixing device for ceramic variable distance of fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm pre-mounted roughing-in set with protecting block fire-proof pipe for laying electronic cables installation box with water group, stop valve and flush elbow connection with noise protected fitting holder 1/2" connecting box for mains supply 230 V CE approved for installation with pre-mixed or cold water for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>
38 546 000		4005176291289	299.00
		<p>Includes: A11 130-290 A2 30-442 B1 130-290 B2 30-442 B3 130-290 B4 26-016</p>	<p>Rapid SL Element for wash basin, for wall mounted fittings 1.30 m installation height for on-the-wall installations or studded walls powder coated steel frame, self-supporting for dry-cladding, completely pre-assembled with fixed connections quick adjustment, lockable fixing material TÜV approved Includes wash basin fixing bolts with fixing device for ceramic variable distance of fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm 2 noise protected fitting connections 1/2" for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>



GROHE RAPID SL FOR WASH BASIN AND BIDET

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 541 000		4005176291234	209.06
 <p>Rapid SL Element for wash basin, single hole installation 1.0 m finished installation height for on-the-wall installations or studded walls Includes: wash basin fixing bolts with fixing device for ceramic HT-outlet bend Ø 50 mm seal Ø 32 mm for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>			
38 553 001		4005176863813	303.09
 <p>Rapid SL Element for bidet, 1.13 m installation height vertical support for ceramics with small bearing area (<205 mm) for on-the-wall installations or studded walls height adjustable fitting connections Includes: bidet fixing bolts HT-outlet bend Ø 50 mm, seal Ø 32 mm 2 noise protected fitting connections 1/2" fixing material for bidet for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>			
38 545 000		4005176291272	292.01
 <p>Rapid SL Element for bidet, 1.00 m installation height for on-the-wall installations or studded walls height adjustable fitting connections Includes: bidet fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm fixing material for bidet for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>			
38 543 000		4005176291258	294.75
 <p>Rapid SL Element for bidet, 0.82 m installation height for on-the-wall installations or studded walls height adjustable fitting connections Includes: bidet fixing bolts HT-outlet bend Ø 50 mm seal Ø 32 mm fixing material for bidet for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>			
38 558 00M		4005176291418	26.41
 <p>Rapid SL Front wall brackets for against-the-wall installations for fixing the elements at the brick-wall or in front of the studded wall adjustment from 130 - 230 mm 2 pieces</p>			

INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
Lufthansa International Limited


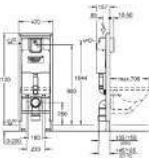



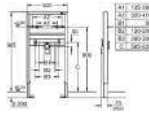
GROHE RAPID SL FOR THE DISABLED



INSTALLATION
SYSTEMS



GROHE RAPID SL FOR THE DISABLED

Ref. No.	Colour	EAN code	Retail Guide Price (€)
38 675 001		4005178863516	308.61
		<p>Rapid SL Element for WC, 1.13 m installation height, 0.42 m width with flush cistern 6-31 for WC bowls 70 cm projection for on-the-wall installations or studded walls powder coated steel frame, self-supporting TUV approved 2 WC fixing bolts fixing device for ceramic distance of fixing bolts 180/230 mm outlet bend Ø 90 mm depth adjustable reducer Ø 90/110 mm inlet and outlet connecting set Insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union for on-the-wall installation please order wall brackets 38 558 00M (sold separately) for the mounting of support rails for the disabled please order fixing element 38 559 001 (sold separately)</p>	
39 140 000		4005176315268	590.95
		<p>Rapid SL Element for WC, 1.13 m installation height with fixing element for back support and support rails with flushing cistern GD 2, 6 L - 2, 6 l for the disabled for WC bowls 70 cm projection for on-the-wall installations or studded walls powder coated steel frame, self-supporting with fixed connections TUV approved 2 WC fixing bolts 4 wall brackets fixing device for ceramic distance of fixing bolts 180/230 mm PP outlet bend Ø 90 mm depth adjustable PP reducer Ø 90/110 mm inlet and outlet connecting set flushing cistern GD 2, 6 - 9 L, containing following features: water supply from left/right or back Insulated against condensation 1/2" water supply connection including integrated angle valve and push fit flexible hose union including wall brackets 38 558 00M for on-the-wall installation for mounting of small flush plates please order revision sheet 40 911 000 (sold separately)</p>	
38 541 000		4005176291234	209.06
		<p>Rapid SL Element for wash basin, single hole installation 1.0 m finished installation height for on-the-wall installations or studded walls Includes wash basin fixing bolts with fixing device for ceramic HT-outlet bend Ø 50 mm seal Ø 32 mm for on-the-wall installation please order wall brackets 38 558 00M (sold separately)</p>	

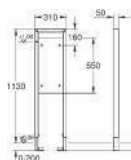


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GROHE RAPID SL FOR THE DISABLED

Ref. No.	Colour	EAN code	Retail Guide Price (€)
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38 559 001		4005176863776	168.75
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Rapid SL
Fixing element, 1.13 m installation height
to fix support for the disabled
0.31 m wide
powder coated steel frame
waterproof plywood
for on-the-wall installation (please order wall brackets 38 558 00M (sold separately))

INSTALLATION
SYSTEMS



لوفتهانزا العالمية المحدودة
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GROHE RAPID SL FITTING SUPPORTS



INSTALLATION
SYSTEMS





لوفتهانزا العالمية المحدودة
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GROHE RAPID SL FITTING SUPPORTS

Ref. No.	Colour	EAN code	Retail Guide Price (€)
37 998 000		4005176262586	109.50

Rapid SL
Fitting support for exposed fittings
for studed walls
for empty elements
2 noise protected fitting connections 1/2"





لوفتهانزا العالمية المحدودة
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GROHE RAPID SL ACCESSORIES



INSTALLATION
SYSTEMS



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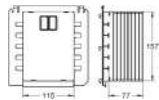

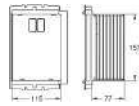

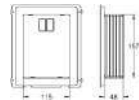
GROHE RAPID SL ACCESSORIES

	Ref. No.	Colour	EAN code	Retail Guide Price (€)
			4005176291418	
	38 629 000		4005176293191	55.29
	38 733 000		4005176837289	32.05
	38 562 001		4005176863752	98.44
	38 779 000		4005176855306	103.89
	37 131 000		4005176144585	39.95



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GROHE RAPID SL ACCESSORIES



Ref. No.	Colour	EAN code	Retail Guide Price (€)
42 397 000 Connecting hose		4005176906855	11.54
			
42 766 000 Distance pipe 3"		4005176222115	12.59
			
38 338 000 Water supply pipe connector		4005176286179	29.24
 			
40 911 000 Inspection shaft for small flush plates for combination with Rapid SL/GD 2 1.13 m cisterns		4005176416132	11.95
 			
40 950 000 Inspection shaft for small flush plates for combination with Rapid SL and Uniset with 0.82 m/1.00 m installation height	Chrome	4005176478994	16.95
 			
40 949 000 Inspection shaft for small flush plates for combination with 80 mm cistern	Chrome	4005176477881	22.00
 			

INSTALLATION
SYSTEMS



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GROHE RAPID SL ACCESSORIES

	Ref. No.	Colour	EAN code	Retail Guide Price (E)
	66 791 000		4005176866562	15.64
	Inspection shaft for combination with Rapid SLX cisterns			
	43 617 000		4005176841163	72.41
	Motor support device for Rapid SL 38 675 for the disabled as of mid 2008 or installation of infra-red electronic			
	42 216 000		4005176803185	19.94
	PVC waste bend diameter 90/100 mm			



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MINI BAR



لوفتهانزا العالمية المحدودة
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المواصفات الفنية

الشاشة	عرض رقمي (نعم/لا)	لا
الكمبيوتر	5 سنوات	الضمان
الطاقة	فولت	220 فولت
الخصائص التقنية	اللون	أبيض
الأبعاد	الوزن	15 كيلو جرام
أبعاد	الارتفاع	83.1 سم
أبعاد	العرض	47.4 سم
الشاشة	عرض رقمي (نعم/لا)	لا
مميزات	برادة ماء	لا
مميزات	نظام التذويب	يدوي
مميزات	التيار الهوائي	لا
مميزات	نوع المنتج	ثلاجة مدمجة
مميزات	اسم الماركة	كلاس برو
مميزات	التصميم	باب واحد
مميزات	باب داخل باب	لا
مميزات	شاشة تفاعل مدمجة	لا
مميزات	كاميرا داخلية	لا
مميزات	صانع الثلج	لا
مميزات	مستوى كفاءة الطاقة	د

كلاس برو ثلاجة 3.2 قدم، باب واحد، أبيض



تفاصيل المنتج

- يحتاج البعض إلى ثلاجة بالحجم الصغير بما يتناسب مع الأطعمة والمشروبات التي يحتاجها خلال يومه، تأتي هذه الثلاجة بتقسيم داخلي ورفوف لتنظيم المحتويات بداخلها، كما يوجد مكان لحفظ المشروبات وقوارير الماء.
- بفضل التبريد المثالي الذي تمتاز به هذه الثلاجة الرائعة، لن تقلق بشأن تلف أو هدر الأطعمة، حيث تحافظ على نضارة الخضار والفواكه ليبقى طازجا، وحفظ اللحوم والمجمدات.
- يوجد منظم للتحكم بدرجة الحرارة الداخلية للثلاجة، يمكنك اختيار درجة الحرارة بما يتناسب مع الجو المحيط سواء بفصل الصيف أو الشتاء، مع البقاء على مستوى التبريد المناسب للماكولات لتبقى بحالتها الصحية للأكل.



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SAFE BOX

Safe box (Honeywell)



تفاصيل المنتج

- قفل رقمي قابل للبرمجة للحفاظ على الأشياء الثمينة آمنة
 - يتضمن مفتاحي إلغاء للاستخدام في حالات الطوارئ
 - مصنوع من الفولاذ مع أبواب مجوفة لقوة التحمل
 - حصيرة أرضية تمنع التسبب في تلف المحتويات
- تعد خزنة هانيويل الإلكترونية حل تخزين مثالي لمقتنياتك الثمينة والمستندات الأساسية. تتميز بقفل رقمي قابل للبرمجة للحفاظ على أمان الأشياء الثمينة الخاصة بك. تأتي خزنة هانيويل أيضا مع مفتاحين للاستخدام في حالات الطوارئ. تضمن هذه الخزنة الإلكترونية المتانة ومصنوعة من الفولاذ عالي الجودة مع أبواب مجوفة. يمنع بساط الأرضية إلحاق الضرر بالمحتويات الداخلية.



لوفتهانزا العالمية المحدودة
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المواصفات الفنية

التميزات	قفل رقمي قابل للبرمجة
السعة	7.7 لتر
الأبعاد الداخلية	197 x 302 x 302 ملم
الأبعاد الخارجية	200 x 310 x 205 ملم
الأمان	حماية لوية ومضادة للسرقة
مقاومة الماء	لا
نوع المنتج	خرقة حماية
نوع القفل	قفل رقمي
مقاومة الحريق	لا
الوزن	6 كجم
الضمان	٢ سنوات
عدد محتويات الصندوق	قطعة واحدة
ميزة 1	تم تضمين مفاتيح تجاوز الوصول
ميزة 2	2 قفل مباشر من الفولاذ الصلب
مميزات خاصة	مفروشة بالسجاد
المادة	منيفل
الوزن	6.3 كجم
اللون	أسود
الطول	20 سم
النوع	خرنات فندق
الأبعاد (الارتفاع * العرض * العمق)	20.5 x 40 x 20 سم
العرض	40 سم
الارتفاع	20.5 سم
عدد القطع	1
مشاركة	موتل ويلد



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ELECTRIC SWITCHES



لوفتهانزا العالمية المحدودة
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MOSAIC,

THE NEW GENERATION OF
INNOVATIVE FUNCTIONS



→ CATALOGUE PAGES INSIDE

THE GLOBAL SPECIALIST
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES





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لوفتهانزا العالمية المحدودة
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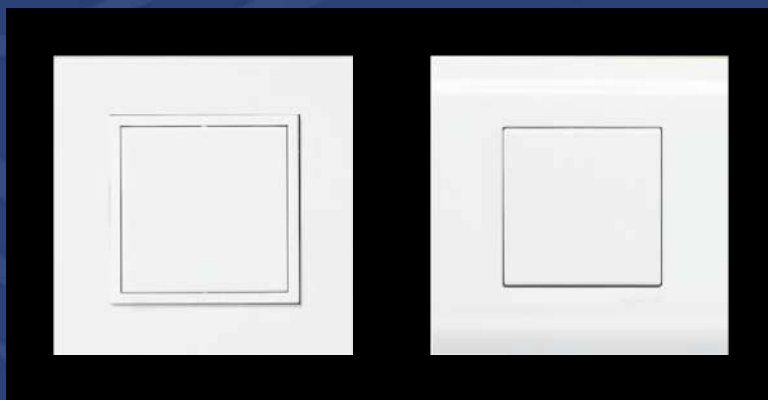


لوفتهانزا العالمية المحدودة
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45 years of success, 3 generations for a timeless range

Buoyed by the success of its unique concept (support frame +mechanism +plate) the Mosaic range has been able to combine the need for new functions with the requirements of the standards concerning electrical installations in residential and commercial buildings (private or public), with its unshowy, clean aesthetics



1971

Created by Legrand, the first generation of the Mosaic range has just been produced. The beginning of a long history for what would become a standard in the world of electrical wiring accessories.

1995

For its second generation, Legrand updated the look of Mosaic with a softly rounded plate to be combined with new functions, adding an aesthetic dimension.



لوفتهانزا العالمية المحدودة
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2011

For Mosaic's 45th anniversary, Legrand is innovating and offering new functions which can adapt to market constraints, Stylish appearance and high-quality finish, new functions in compliance with SASO requirements - all these features make Mosaic an outstanding product.



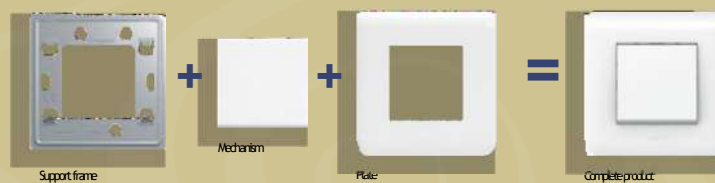
لوفتهانزا العالمية المحدودة
Lufthansa International Limited



Mosaic, simplicity and modularity for a high quality range

Simplicity & quality

Multiple possible combinations which can be used in any configuration.



PRODUCTS MADE IN FRANCE & THE EUROPEAN UNION



Support frames, mechanisms and plates are
manufactured in France and the
European Union.



Modularity & compatibility

The multiple mechanism combinations possible with Mosaic plates make them suitable for use in any configuration imposed by buildings.

FOR 1 GANG BOX



1-module plate



2-module plate



3-module plate (white finish only)

FOR 2 GANG BOX



3-module plate



2x2 module plate - horizontal mounting



5-module plate
Vertical mounting

SPECIAL PLATES FOR BRITISH STANDARD
SOCKETS OUTLETS



For 1 gang switched socket



For 2 gang switched socket

COMPATIBILITY



Mosaic mechanisms are fully compatible with Legrand floor boxes, columns and trunking systems



Mosaic, a rich offer of functions

Mosaic enhances buildings with the performance of a true specialist product. With a rich offer of functions, Mosaic range is suitable for the most common applications and the most sophisticated, such as access control readers and equipment for healthcare buildings

Standard functions

CONTROL	CONNECTION
 1-way switch	 2-way push button
 2-way switch	 2P+E British standard socket outlet
 Roller blind switches	 2P+E British standard switched socket outlet
ENERGY SAVING	COMMUNICATION & DATA
 Automatic switch	 Single TV socket
 Dimmer 2-wire	 TV/RD/GPO socket
 Dimmer 3-wire - 1000 W	 Telephonesocket
	 RJ45 data socket
	 USB socket



Innovative dedicated functions

DEDICATED FUNCTIONS



Illuminated sign



Ventilation control



Illuminated obstacle indicator



Bulkhead light



Emergency stop mushroom head pushbutton

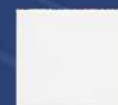


Audio/Video socket

ANTIMICROBIAL RANGE



1-way switch antimicrobial



2-way switch antimicrobial



Socket outlet 13A with USB charger



2P+E British standard socket outlet, antimicrobial



Double USB Type-C charging sockets 2 modules



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Mosaic, an attractive and practical design

With a soft clean line, timeless materials and colours,
the Mosaic range lends an attractive touch to satisfy any desire
in the residential and commercial sectors

4 plate finishes





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2 mechanism finishes

PLASTIC



White



Aluminium

COMPOSITIONS WITH A CHOICE OF DIFFERENT FINISHES



Plastic and metal finishes
with White mechanism



Plastic and metal finishes
with Aluminium mechanism



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CATALOGUE PAGES



لوفتهانزا العالمية المحدودة
Lufthansa International Limited

MOSAIC™

LEGEND IS
DRIVEN BY
INNOVATION





Mosaic™

switches, push-buttons, double pole switches, pull cord switches



Selection chart for, supports and plates p. 26-27

Pack	Color	Switches 10 A - 250 V [~]
	White	
	Red	
10	678 100	678 100
10	678 102	678 102
10	678 105	678 105
10	678 101	678 101
10	678 103	678 103
10	678 104	678 104
10	678 106	678 106

Pack	Color	Switches 10 AX - 250 V [~]
	White	
	Red	
10	678 108	678 108
10	678 109	678 109
10	678 110	678 110
10	678 111	678 111

Pack	Color	Switches 20 AX - 250 V [~]
	White	
	Red	
10	678 112	678 112
10	678 113	678 113
10	678 114	678 114
10	678 115	678 115
10	678 116	678 116

Pack	Color	Push-buttons 6 AX - 250 V [~]
	White	
	Red	
10	678 120	678 120
10	678 121	678 121
10	678 125	678 125
10	678 122	678 122
10	678 123	678 123
10	678 124	678 124
10	678 126	678 126

Pack	Color	Double pole switches 45 A - 250 V [~]
5	678 148	678 148
5	678 150	678 150

Pack	Color	Pull-cord switches
1	0770 14	0770 14
1	0770 44	0770 44
10	0898 00	0898 00



Mosaic™ Programme mechanisms

dimming control



Selection chart for boxes, supports and plates p. 26-27

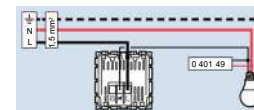
Pack	Cat.Nos	Dimmer switches 110-230 V ± - 50 Hz
1	0 784 05	Leading edge dimmer, without neutral For the following types of lamps: - halogen 230 V and incandescent: 40 W to 600 W - halogen with ferromagnetic or electronic type L transformer: 40 VA to 600 VA White
1	5 modules 0 784 02	1000 W dimmer, with neutral For the following types of lamps: - halogen with ferromagnetic or electronic transformer: 100 VA to 1000 VA - halogen and incandescent 230 V: 100 W to 1000 W When switched on, gradually (2 seconds) lights up at the level set before last switch-off 5 LEDs displaying the current level of the circuit White
Pack	Cat.Nos	Dimmer switches 110-230 V ± - 50 Hz
1	0 784 07 0 784 08	Universal dimmers Without neutral, 2 wires Push-button dimmer for all types of lamps : - dimmable LEDs: 75 W (10 lamps max.) - dimmable compact fluorescent lamps: 75 W (10 lamps max.) - halogen with transformer: 400 VA - fluorescent tube: 200 VA - halogen 230 V and incandescent: 400 W Can be associated with one or several push-buttons without neon, for ON/OFF or dimming control Lights come on again at the same lighting level as before they were last switched off White Alu
1	2 modules 0 784 04	Dimmer switch with neutral, for 1-10 V ballast For lamps with 1-10 V ballast, 600 VA White
1	2 modules 0 784 10	Auxiliary control unit for DIN dimmer Remote control dimming peripheral for local control of a remote control dimmer, with the same easy operation as a conventional dimmer A power supply Cat.No 0 036 60 is required for controlling DIN-rail modular remote control dimmers Cat.Nos 0 036 60/71

Mosaic™

color-lighting management



Pack	Cat.Nos	Color-lighting dimmers
1	0 488 60	Allow the user to create lighting ambiances or (LEDs) DALI ballasts and drivers or controlling max. 21 RGB (Red/Green/Blue) ambiances Configuration via "learn" button Ideal for show-rooms, shops, restaurants, hotels, beauty salons... Work with power supply Cat.No 0 035 15 White
1	0 488 60	Dimmer - 1 area Allows manual change of colors
1	0 488 60	Touch dimmer - 1 to 4 areas Allows the creation of up to 4 lighting ambiances in up to 4 areas Multicolor dimming Light adjustments: - colors: via touch chromatic circle - intensity: via bargraph Supplied with support for installation in 2-module flush-mounting box depth 50 mm
1	0 035 15	DALI power supply for installation in false ceiling Works with color-lighting dimmers Cat.Nos 0 784 03 and 0 488 60 30 V - 250 mA - 16 V=
1	0 401 49	Active Power Compensator Allows 2-wire electronic switches without neutral to be compatible with all loads (LED, fluocompact...)





Mosaic®

time switch, ventilation control, Roller



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	Programmable time switch
1	784 25	Used to program the control of a circuit with the following loads: - 1200 W 230 VA incandescent and halogen - 1800 VA fluorescent \varnothing 26 or 38 mm and ELV halogen with ferromagnetic or electronic transformer - 1800 W motors (ventilation only) - 3600 W resistive (heating only) 20 hours working reserve Capacity: 8 weekly programmes Temporary or permanent override 1 output - 6 A - 250 VA $\cos \phi = 1$ 1 changeover contact 2 modules 22.5 x 45 mm
Pack	Cat.Nos	Timer switch
1	0784 20	Interference suppression conforming to standard EN 55022 For timer control of a circuit with the following loads: - 1000 W 230 V \pm incandescent and halogen - 1840 W resistive (heating) - 400 VA fluorescent and ELV halogen It is possible to install a number of timer switches in parallel on the same circuit 2-wire installation in 40 mm min. box Has an integrated LED. 2 modules
1	678 107	Ventilation control
1	678 107	2-way switch for direct control of controlled mechanical ventilation 10 AX - 250 V A 2 modules 22.5 x 45 mm
10	0770 25	Roller blind pushbuttons
1	0792 25	For 1 roller blind For controlling 500 W max. blind, awning or canopy motor by electronic control box
10	0770 26	For 1 or several roller blinds For direct control of motors Can be associated with multiple control relay Cat.No 0 676 22 (2 positions: up/down)
1	0792 26	
Pack	Cat.Nos	Roller blind pushbuttons
10	0770 25	For direct raise/lower/stop control of 500 W max. blind, awning or canopy motor
1	0792 25	

antimicrobial⁽¹⁾

Mosaic®

key fob switches, call indicators and roller blind switches



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	Keycard switches
1	784 45	For energizing a circuit by inserting a key fob Cat.No 898 06 or a smart card (e.g. access card for a hotel room) Power requirement: 230 V A - 50/60 Hz Time delay of approx. 30 seconds after card removal Key fob Supplied complete with a label holder for individual identification
1	678 180	
1	898 06	
1	0784 80	For energizing a circuit by inserting an ISO format card (e.g. Cat.No 0 767 11 or hotel room access card) Time-delay: 30 sec. after card removal Backlight insert badge area 2 modules
1	0767 28	
1	0767 28	Electronic keycard switches Operates via contact with ISO card or key fob Cat.No 0 898 06 Communication: BUS/SCS Only operates with MIFARE contactless ISO badge cards (e.g. Cat.Nos 0 767 11/12/13) Contact capacity: - 110 V, power 15 VA - 230 V, power 30 VA
10	767 11	For RFID keycard switch MIFARE contactless badge card ISO format (50 x 80 mm) Chip: 13.56 MHz Standard 1 KB memory ISO contactless card Dim.: 50 x 80 mm
5	770 47	Hotel bedroom indicators Indicator lamp and bell push Enables the resident to inform hotel staff of the room status Two settings are possible: - do not disturb - please clean the room Installed in the corridor, displays calls
5	770 48	Supplied with lamps Cat.Nos 899 16/17 Allows the user to select the desired setting Supplied with lamps Cat.Nos 899 06/07

15



Mosaic™

illuminated signage functions



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	illuminated signs 230 V A
5	785 20	Mechanisms integrating LEDs and a pivoting window that can take preprinted labels Customised labels can be printed using a simple text editor. Supplied with transparent paper to personalize labels Signs with white LEDs A choice of 2 power levels (0.2 W or 1 W) 2 modules 22.5 x 45 mm
5	785 21	Signs with blue LEDs A choice of 2 power levels (0.2 W or 1 W) 2 modules 22.5 x 45 mm
5	785 24	Signs with 2-state LEDs with choice of green or red configurable on the mechanism (1 W) 2 modules 22.5 x 45 mm
1	785 22	Signs with white LEDs (1 W) 5 modules 22.5 x 45 mm
1	785 23	Signs with blue LEDs (1 W) 5 modules 22.5 x 45 mm
1	White 785 11	Skirting light with motion sensor Mechanism equipped with an infrared detection cell and a LED beam. To be installed close to the floor (next to a socket for example). When someone passes, the mechanism detects movement and switches the light on. Ideal to illuminate a corridor at night without dazzling people, or to highlight possible danger. Equipped with an audible signal that can be deactivated (when product is used for lighting) or not (so as to indicate danger)
1	White 785 10	Bulkhead pilot light To be installed in skirting trunking or bulkhead strip 230 V - 2 modules White antimicrobial ¹⁾
10	572456	Lamps LED 230 V for locator switch - blue
10	572455	LED 230 V for indicator switch - red
10	899 16	LED 230 V (1.7 mA) for orange, red or transparent indicator units
10	899 17	LED 230 V (1.7 mA) for green indicator units

Mosaic™

protection and buzzers, emergency stop



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	Proximity MCBs
1	775 22	Used for local protection of part of a circuit against overloads and short circuits Used in addition to the main protection device. Due to its proximity to the user and its discrimination with the main protection device, the restart can be immediate. 2 modules 22.5 x 45 mm Single pole + Neutral thermal magnetic MCB 230 V A Used in combination with other devices, the proximity MCB has the same discrimination characteristics as the DNX P + N with the same rating. The Mosaic proximity MCB can also be used as a local consumption limiter (depending on its rating). Breaking capacity: 3000 A - NF C 61-410 (10/16 A) 1500 A - NF C 61-410 (6 A) 16 A
1	775 32	Single pole + Neutral RCBO 230 V A The residual current device provides additional protection of people (premises with conductive flooring, presence of water, etc.) against direct contact with live parts or earth leakages 16 A - 30 mA have a test button
10	White 766	Buzzer 230 V A - 50/60 Hz Consumption 25 mA Sound level 70 dB at 1 m 2 modules 22.5 x 45 mm
41	White 0 775 40	Voltage surge protector 16 A - 250 V ± - 50/60 Hz Protection against overvoltages of atmospheric or industrial origin, in an installation already protected by a voltage surge protector in the panel (p. 74). For installation downstream of an RCBO, protects all the sockets wired in cascade with the voltage surge protector. Operation displayed by indicator light. Keeps the socket energised after an overvoltage (mains or lightning strike) until replacement of module. Cat.No 0 775 41 Nominal discharge current (In): 1.5 kA Maximum permissible current (Imax): 6 kA Protection level (Up): L-N: 1 kV; N-PE: 1 kV Open circuit voltage (Uoc): 3 kV Conform to standards: EN 61643-11 White 2 modules
1	White 0 775 41	Replacement module for voltage surge protector For Cat.No 0 775 40



Mosaic™

motion and presence sensors



Selection chart for boxes, supports and plates p. 26-27

All sensors are compatible with any lamp - Detection field: 180° - Detection range: 8 m. Recommended installation height: 1.20 m
Integrated self-protection against overloads and short-circuits. 2 modules

Pack	Cat.Nos	2-wire motion sensors, without neutral	3-wire motion sensors, with neutral (continued)
1	0 784 58 0 792 47	<p>IR detection Accepted power by lamp type: - LEDs: 3 to 100 W - compact fluorescent: 3 to 100 W -LEDs, CFLs, Halogen, fluo tubes with ferromagnetic or electronic transformer: 3 to 250 VA -halogen 230 V, incandescent: 3 to 250 W For LED and compact fluorescent lamps If several sensors are installed on the same circuit, the minimum load changes: refer to the technical sheet Possibility to install up to 3 sensors in parallel Time delay setting from 10 s to 10 min Light level threshold setting from 5 lux to 1275 lux Standby consumption : 0.2 W</p> <p>Sensor without override ○ White ● Alu</p> <p>Sensor with override ○ White ● Front override button to select "Always ON", "Automatic" or "Always OFF" mode</p>	<p>IR detection - 400 W Accepted power by lamp type: - LEDs: 0 to 50 W - Compact fluorescent: 0 to 50 W -LEDs, CFLs, Halogen with ferromagnetic or electronic transformer: 0 to 200 VA -fluo tubes with ferromagnetic or electronic transformer: 0 to 150 VA -Halogen 230 V, incandescent: 0 to 400 W Only one detector per circuit No additional remote manual control with push button Time delay setting from 10 s to 10 min Light level threshold setting from 5 lux to 1275 lux Standby consumption: 0.55 W</p> <p>○ White ● Alu</p>
1	0 784 57	<p>2-wire motion sensor for time-lag switch, without neutral To be associated with a time-lag switch (p. 85) Allows automatic turning on/off in a hall, staircase... Replaces a push-button The time delay setting must be the same as that of the time-lag switch ○ White</p>	<p>3-wire presence sensor, with neutral Infrared and ultrasonic double technology Allows a precise presence detection Checks the light level continuously and not only at the time of detection Propose a special mode: manual switching on with integrated pushbutton, automatic switching off Accepted power by lamp type: - LEDs: 0 to 250 W - Compact fluorescent: 0 to 250 W -LEDs, CFLs, Halogen, fluo tubes with ferromagnetic or electronic transformer: 0 to 1000 VA -Halogen 230 V, incandescent: 0 to 2000 W Up to 10 sensors can be connected in parallel Additional remote manual control possible with push button Time delay setting from 5 s to 30 min Light level threshold setting from 5 lux to 1275 lux Standby consumption : 0.4 W</p> <p>○ White ● Alu</p>
1	0 784 54 0 792 58	<p>3-wire motion sensors, with neutral IR detection - 2000 W Checks the light level continuously and not only at the time of detection Accepted power by lamp type : - LEDs: 0 to 250 W - Compact fluorescent: 0 to 250 W -LEDs, CFLs, Halogen, fluo tubes with ferromagnetic or electronic transformer: 0 to 1000 VA -Halogen 230 V, incandescent: 0 to 2000 W Up to 10 sensors can be connected in parallel Additional remote manual control possible with push button Time delay setting from 5s to 30 min Light level threshold setting from 5 lux to 1275 lux Standby consumption : 0.2 W</p> <p>○ White ● Alu</p>	<p>○ White ● Alu</p>



Mosaic™ Programme mechanisms

Bluetooth sound diffusion



0 787 45

5 739 82



0 673 03

Support frame and plate selection charts p. 26-270

Pack	Cat.No	Bluetooth sound diffusion
1	0 787 45	<p>Allows music files or Internet Webradio reception from a smartphone or other devices via Bluetooth (wireless) or from jack input (3.5 mm cord not included)</p> <p>Loudspeakers to be wired to the bluetooth module (ideal for bathroom, kitchen or bedroom)</p> <p>Bluetooth module 15 V= power supply Stereo or mono input on a 4/8 or 16 ohms loudspeaker 2 modules</p> <p> White</p> <p>Power supply in false ceiling For Bluetooth module</p>
1	0 673 22	<p>Power supply 230 V~ Output 15 V= - 3.5 W For use in a Plexo box Cat.No 0 920 52</p>
Loudspeakers		
1	0 673 27	<p>For false ceiling and plasterboard White flush loudspeaker Depth 27 mm Ø hole: 65 mm L max: 75 mm</p> <p>Visible depth: 5 mm Power: 2 W / 16 ohms - 2" Equipped with clips for attachment</p>
1	5 739 82	<p>White flush loudspeaker Depth 57 mm Ø hole: 90 mm L max: 100 mm</p> <p>Visible depth: 7.5 mm Power: 20 W musical - 10 Wrms/8 Ω Sensitivity 86 dB (1 W/1 m) Equipped with clips for attachment</p>
1	0 673 03	<p>For wall flush-mounting Black flush loudspeaker Depth 40 mm Visible depth: 10 mm L max: 127 mm Power: 12 W musical - 6 Wrms/16 Ω Screw mounting for installation in flush-mounting box Cat.No 0 892 79 or 0 893 79 (p. 431)</p>

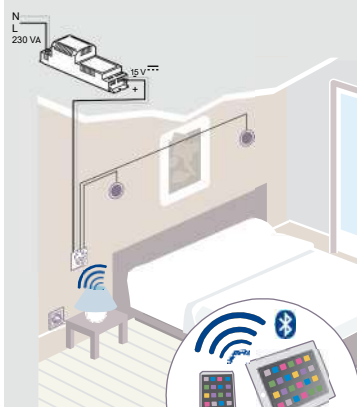
Loudspeaker sockets,
p. 23



Mosaic™ Programme mechanisms

Bluetooth sound diffusion

Installation principale



Musical enjoyment

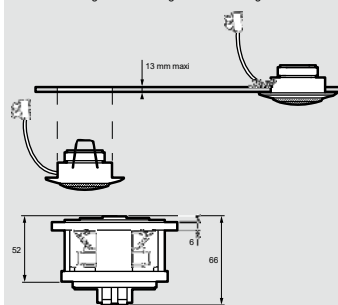
- Mobile access to digital radio
- Mobile access to my download music
- Provides every day comfort

Installation

- Easy to set up with Bluetooth
- Mounting multigang with all Mosaic plates (p. 838-839)

Loudspeakers

- High quality sound with 8 Ω and 16 Ω loudspeakers
- Flush-mounting in false ceiling or wall-mounting





Mosaic™ Programme

wireless power chargers



0775 80 supplied with sticker

0775 99

0775 98

Wireless power chargers for fast charging a smartphone with a Qi receiver
Power supply standby mode consumption < 0.07%
Conform to the Qi WPC standard (Wireless Power Consortium): certified for professional Qi 1.2.3 projects
Conform to EN 62479 standard (EMF emissions)
Conform to ICNIRP specifications (health protection)
Do not interfere with other wireless signals (Zigbee, TNT, GSM, 4G, etc)

Pack	Cat.No	Qi wireless chargers - for integration into the furniture
1	0775 80	<p>Specifically designed for mounting horizontally on furniture. For meeting rooms, offices, public areas, etc 80 mm drilling diameter, Aluminium colour. Extra-slim with thickness < 1.5 mm. Supplied with identification sticker diameter 85/110 mm, 2.5 m cord, fixing base and cable ties. 110-240 V universal power supply Plugs conforming to European, BS, US, Australian/ Chinese standards</p> <p>5 W - IP 44 / IK 08 charger 15 W - IP 44 / IK 06 charger</p>
1	0776 00	
1	0775 99	<p>Flush-mounted wireless chargers - for public area</p> <p>1 A - 5 V/5 W wireless charger. Specially designed for public buildings, passageways or transit areas, swimming pools, etc. IK 08 - IP 66 - Class II SELV Comes with 2 induction antennae for fast smartphone charging. Recognition area: 50 x 80 mm Plate at an angle of 10° with non-slip coating to hold the terminal safely in place during charging Screws onto flush-mounting box with 60 mm fixing centres, min. depth 40 mm, French, German or British standard. Can also be fixed at 4 points Can be mounted on rectangular boxes and outdoors 110/230 VA Phase + Neutral power supply Mechanism supplied with cover plate, attached with 2 Torx screws at the side</p> <p>Aluminium colour Dimensions: 141 x 95 x 51 mm 2 x 2.5 mm² terminals</p>
1	0775 98	<p>Wireless charger + Type-A USB - Mosaic version</p> <p>1 A - 5 V/5 W charger with one 2.4 A/12 W USB port to power a second device Specially designed for work areas For installation in flush-mounting box, surface mounting box, workstation kit, column module, multi-outlet extension for offices, etc To be fitted with a support and a plate depending on the selection of the wiring accessories ranges Comes with 2 induction antennae for fast intuitive smartphone charging. Recognition area: 50 x 80 mm Plate at an angle of 10° with non-slip coating to hold the terminal safely in place during charging Dimensions: 136.5 x 70 x 56.5 mm Anti-theft lock function Can be mounted in multiple horizontal positions</p> <p>White with metallic finishing plate 2 x 2.5 mm² terminals</p>

See more on USB chargers



Mosaic™ Programme

wireless power chargers

Wireless power charging

A Legrand innovation for fast, easy charging

Using wireless energy transfer
No need for cords and connectors

An open international standard:

Wireless Power Consortium: 270 members, ensuring interoperability with induction-compatible phones
Qi: global standard adopted by vehicle manufacturers and cafés/hotels/restaurants
Products certified for professional Qi 1.2.3 projects

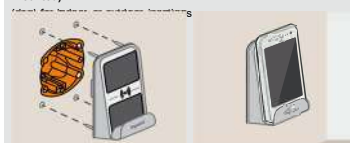
Ergonomically designed to suit different environments

Horizontal charging on furniture



Insertion in an 80 mm diameter cut-out / Fixed into furniture
External power supply with 2.5 m cord

Vertical charging on a wall in public areas (semi-flush-mounted)



Excellent resistance to impacts (IK 08) and adverse weather conditions (IP 66)
Can be fixed directly on the flush-mounting box or for extra strength drilled with anchor bolts

Charging in Mosaic environment

With induction and 2.4 A / 12 W USB socket



See more on USB chargers





Mosaic™

British standard socket outlets,



Selection chart for, supports and plates p. 26-27

Pack	Cat. Nos.	Description
		Socket outlets 2P+E - modular units
		Shuttered for child safety ASTA licence Conform to BS 1363: part 2 2 modules 22.5 x 45 mm Use 2-module plates and support frames (p. 22-23)
		White
		Alu
10	775 05 678 198	13 A 13 A - dedicated red 13 A - dedicated green 13 A - dedicated orange
		Socket outlets 2P+E - 13 A - 250 V A
10	678 240	Double pole switched Shuttered for child safety Use dedicated plates (p. 22-23)
10	678 241	Conform
10	678 242	DP 1 gang + neon
		White
		Alu
5	678 140 678 190	DP 2 gang twin earth DP 2 gang twin earth + neon
		BS Standard Socket outlets - 13A-250V with USB charger
5	678 191	Conform to BS 1363-2:2016 Shuttered for child safety Conform to IEC 60950-1 USB Type-A 2.4 A - 5 V = - 12W Consumption in passive mode < 0.07W
5	678 142 678 192	
		Fused connection units 13 A - 250 V A
5	678 193	Double pole - fused 13 A (fuse supplied) Use dedicated plates (p. 22-23) Conform to BS 1363: Part 4
1	678 146	Switched + neon Flex outlet knockout and cord grip Captive fuse carrier (padlockable) Captive terminal screws Dimensions: 86 x
10	743 63	White

Mosaic™

USB charging sockets



Selection chart for supports and plates p. 26-27
Technical characteristics, see e-catalogue

Pack	Cat. Nos.	Description
		USB power supplies
		For recharging portable devices Conform to IEC 62684-2011-01 Consumption in passive mode < 0.1 W 2P+E tap-off connection via 2.5 mm ² screw terminals Supplied cordless
		Double USB sockets - 5V - 2.4 A
		For telephones, smartphones, MP3/MP4 players and fast-charging tablet PC
5	0 775 94	White
1	0 793 94	Alu
		Single USB sockets - 5V - 1.1 A
		For telephones and smartphones
10	0 775 91	1 module
		USB power supplies with retractable cord
		For recharging portable devices such as telephones and smartphones Single socket 5 V - 1000 mA equipped with a retractable cord with micro USB connector Conform to IEC 62684-2011-01 Consumption in passive mode < 0.2 W 2P+E tap-off connection via 2.5 mm ² screw terminals Cord length : 30 cm
1	0 775 93	White
1	0 793 93	Alu
		USB charging sockets Type-C
		Universal charger for portable devices Conform to IEC 62680-1-3 Surge protection > 1 kV Consumption in passive mode < 0.07 W Power supply AC/DC efficiency at highest level (VI) 2 x 2.5 mm ² screw terminals Class II SELV Supplied cordless
		Double USB Type-A + USB Type-C sockets - 5 V - 3 A - 15 W
		For smartphones and fast charging tablets PC 2 modules
1	0 775 92	White
1	0 793 92	Alu
		Single USB Type-C sockets - 5 V - 1.5 A - 7.5 W
		For telephones and smartphones
1	0 775 90	White
1	0 775 90	Alu
		Double USB Type-A + USB Type-C sockets - 5 V - 3 A - 15 W
		For smartphones and fast charging tablets PC 2 modules
		White



Mosaic™

audio and video sockets



Selection chart for boxes, supports and plates p. 26 -27

Pack	Cal.Nos	HDMI type A sockets
		Used to transmit high-definition digital audio/video streams between a source (computer, HD-DVD drive...) and a compatible receiver (TV, videoprojector...)
		Can be associated with HDMI cord and cable
		Preterminated HDMI 1.4 - 1 module
		Equipped with cord, length 15 cm
1	0 787 78	White
1	0 793 78	Alu

Pack	Cal.Nos	Female HD15 sockets
		Used to transmit analog video streams (VGA, XGA, UXGA depending on graphic card) between a source (computer) and a compatible receiver (video projector, TV...)
		Preterminated sockets - 1 module
		Equipped with cord, length 15 cm
1	0 787 77	White
1	0 793 77	Alu

Pack	Cal.Nos	Jack sockets 3.5 mm
		3.5 mm jack connectors can be used to create audio/video links
		Preterminated sockets - 1 module
		Equipped with cord, length 15 cm
1	0 787 79	White
1	0 793 79	Alu

Pack	Cal.Nos	Female USB data sockets - for data transfer
		Used to bring connections closer to the user
		For connecting USB devices (scanner-printer, external hard disk)
		Max. cable length: 5 m. Recommended cable: USB A 1 module
		Preterminated USB 3.0 . Equipped with a 15 cm cord
1	0 787 46	White

Pack	Cal.Nos	USB extender - for data transfer
		Used to bring connections closer to the user in case of large distances
		For connecting USB devices (digital school board / interactive whiteboard...) located more than 5 m away from a source (computer...)
		The kit includes a transmitter (1 module) and a receiver (1 module). The link between the transmitter and the receiver is made via a RJ 45 / RJ 45 cord
1	0 787 48	White

AUDIO/VIDEO SYSTEM

The right system to meet your needs

A wide range of technologies (HDMI, HD15 DISPLAY PORT, RCA, JACK) to suit the location and the user requirements



- Quick installation
- Easy connection
- Optimum performance

■ Female HDMI 1.4 preterminated socket



Mosaic™

telephone and television sockets



787 86 787 80 787 32

Selection chart for, supports and plates p. 26-27

Mosaic™

RJ 45 sockets and USB sockets



765 64 794 64 787 61

Selection chart for, supports and plates p. 26-27

Television, national satellite sockets

Pack	Cat.Nos	Description
10	White 787 86, Alu 792 96	Shielded TV sockets TV-IEC male, 5 - 862 Mhz, attenuation ≤ 1,5 dB TV-IEC female, 87,5 - 108 Mhz, attenuation ≤ 1,5 dB SAT "F" screw-in 950 - 2400 Mhz, attenuation ≤ 2 dB For reception of analogue and digital transmissions (DTT, analogue or digital satellite channels, HDTV...) Conform to EN 607 28-1 Recommended cable 17/19 VATC 2 modules 22.5 x 45 mm Screened TV/R/SAT socket - insulated
10	787 83	TV-R socket - male/female Screened TV-R socket - Insulated Ø9.52 mm
10	787 80	Single type "F" screw-in TV socket
10	787 82, 792 92	Single TV socket - male Ø9.52 mm

Pack	Cat.Nos	Description
5	0 787 93	Single TV star sockets Low attenuation: 1 dB TV 9.5 mm male White - 1 module
10	0 787 90	TV "F-type" White - 1 module
5	0 787 95	TV-SAT - 1 module White Low attenuation: 1 dB

Pack	Cat.Nos	Description
10	White 787 30, Alu 792 31	Telephone sockets RJ 11 sockets - 4 contacts Equipped with a modular Jack connector with 1/4 turn terminal for fast connection Tap-off possible 1 module 22.5 x 45 mm

Pack	Cat.Nos	Description
10	787 32	RJ 12 sockets - 6 contacts Equipped with a modular Jack connector with 1/4 turn terminal for fast connection Tap-off possible 2 modules 22.5 x 45 mm

Pack	Cat.Nos	Description
10	787 34	ISDN socket - 8 contacts Self-stripping 1/4 turn terminals for fast connection 2.5 mm² earth terminal Tap-off possible 2 modules 22.5 x 45 mm

RJ 45 sockets

Pack	Cat.Nos	Description
10	White 765 71, Alu 794 71	Certified as conforming to standards ISO 11801 ed.2.0, EN 50173-1 and EIA/TIA 568 Rapid connection sockets, no tool needed Contacts marked with 568 A and B dual colour code and numbers Cat. 6A - UTP 1 module 22.5 x 45 mm
10	765 74, 794 74	2 modules 22.5 x 45 mm
10	765 61, 794 61	Cat. 6 - UTP 8 contacts 2 modules 22.5 x 45 mm
10	765 91	Cat. 5e - UTP 4 contacts 2 modules 22.5 x 45 mm
10	765 51	2 modules 22.5 x 45 mm
10	765 54	2 modules 22.5 x 45 mm

Pack	Cat.Nos	Description
10	0 786 04	Adaptors for RJ 45 connector Equipped with transparent marker holder White - 2 modules For single Keystone connector
10	0 786 10	For 2 Keystone connectors
10	0 786 02	For single Systemax connector
10	0 786 13	For 2 Keystone connectors - inclined 45°
10	0 786 03	For double Systemax connector

Pack	Cat.Nos	Description
1	White 787 61, Alu 792 84	USB sockets Used to bring connections closer to the user Connection via screw terminals cross-section 1 mm² Female USB For connecting USB devices (scanner, printer, external hard disk) Max. cable length: 5 m Recommended cable: USB A 1 module 22.5 x 45 mm



Mosaic™

audio/video sockets



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	Female HD 15 sockets
1	White 787 57 Alu 792 57	Used to transmit analog video streams (VGA, XGA, UXGA depending on graphic card) between a source (computer) and a compatible receiver (plasma, LCD, video projector, etc...) Screw-type female HD 15 sockets 2 modules 22.5 x 45 mm
1	787 72	Solder-type female HD 15 sockets 1 modules 22.5 x 45 mm
1	White 787 74	Female HD 15 + 3.5 mm Jack Used to transmit VGA full pin stream (15-pin) of a computer, plasma...and audio from a portable source Screw-type female HD 15 sockets 2 modules 22.5 x 45 mm
1	White 787 47	Female 2 RCA socket Provides the stereo audio link for any peripheral device such as a DVD drive, camera, video recorder 1 module 22.5 x 45 mm
1	787 54 792 54	Female 3 RCA sockets Provides the composite video and stereo audio link for any peripheral device such as a DVD drive, camera, video recorder 1 module 22.5 x 45 mm

Mosaic™

audio sockets and cables, cable outlets and blanking plates



Selection chart for, supports and plates p. 26-27

Pack	Cat.Nos	XLR 3-pin sockets
1	White 787 55 Alu 792 55	Provides the stereo link for microphone, amplifier, mixing console, etc. Recommended microphone cable: 1 audio pair 0.22 mm ² shielded Recommended enclosure cable: 1 audio pair 1.5 mm ² (can take 2.5 mm ²) Max. cable length: 50 m Female 2 modules 22.5 x 45 mm
10	White 787 50 Alu 792 50	Loudspeaker sockets Terminals 4 mm ² 1 module 22.5 x 45 mm
1	327 80	Cables For connecting 2 sockets a long distance apart HDMI cable For connecting HDMI sockets at a distance of up to 10 m Length 20 m
1	327 81	VGA cable For connecting full pin HD 15 sockets at a distance of up to 20 m Length 20 m
10	White 775 51	Cable outlets 16 A cable outlet with terminals Equipped with 4 automatic connection terminals on the front and rear face for easy connection With cable grip 2 modules 22.5 x 45 mm
10	775 50	20 A cable outlet For cable: Ø max. 12 mm, Ø min. 4 mm With cable grip 2 modules 22.5 x 45 mm
10	775 52	Wire outlet Ø 8 mm 1 module 22.5 x 45 mm
10	White 770 70 Alu 792 70	Blanking plates 1 module 22.5 x 45 mm
10	770 71 792 80	2 module 22.5 x 45 mm



Mosaic™
antimicrobial range



Products made of antibacterial material based on silver ions Ag+
This technology can eliminate most bacteria, fungi and viruses, without the risk of building up resistance
Particularly suitable for healthcare establishments (hospitals, clinics, nursing homes, laboratories, waiting rooms, etc) and in general for spaces subject to hygiene restrictions (industrial, shared and restaurant kitchens, child care centers, toilets, etc)
Products tested in accordance with standard JIS Z 2801 by an approved COFRAC laboratory

Pack	Cat.Nos	Switches 10 A - 250 V A
10	678 201	Single module mechanisms 1 module 22.5 x 45 mm 2-way switch
10	678 203	Two module mechanisms 2 modules 22.5 x 45 mm 2-way switch
10	678 206	2-way switch with indicator
Switches 20 AX - 250 V A		
10	678 117	Single module mechanisms 1 module 22.5 x 45 mm 2-way switch
Push-buttons 6 AX - 250 V A		
10	678 221	Single module mechanisms 1 module 22.5 x 45 mm 2-way push-button
10	678 222	Two module mechanisms 2 modules 22.5 x 45 mm 2-way push-button
10	678 224	2-way push-button with indicator
2P+E socket outlets		
10	678 148	British standard - 13 A - 250 V A Shuttered for child safety ASTA licence Conform to BS 1363: part 2 2 modules 22.5 x 45 mm

Pack	Cat.Nos	RJ 45 sockets
Certified as conforming to standards ISO 11801 ed 2.0, EN 50173-1 and EIA/TIA 568 Rapid connection sockets, no tool needed Contacts marked with 568 A and B dual colour code and numbers		
10	765 82	Cat. 6 FTP - 9 contacts 1 module 22.5 x 45 mm
10	765 81	Cat. 6 UTP - 8 contacts 1 module 22.5 x 45 mm
Telephone socket		
10	678 129	RJ 11 sockets - 4 contacts Equipped with a modular Jack connector with 1/4 turn terminal for fast connection Tap-off possible 1 module 22.5 x 45 mm
Television socket		
10	678 130	Single TV socket - male Ø9.52 mm 2 modules 22.5 x 45 mm
Blanking plates		
10	787 20	1 module 22.5 x 45 mm
10	787 21	2 modules 22.5 x 45 mm
Plates		
10	678 025	1 gang for 1 module 22.5 x 45 mm
10	678 026	1 gang for 2 modules 22.5 x 45 mm
10	678 027	2 gang for 2 x 2 modules 22.5 x 45 mm
10	678 024	IP 44 plates 1 gang for 2 modules 22.5 x 45 mm Equipped with a membrane which can receive mosaic control and connection functions (not mounted on surface mounting boxes)

Contains a silver compound to prevent the growth of bacteria on the surface of the plate



Mosaic™
keyswitches, keycard switches, TV socket



Selection chart for, supports and plates p. 26-27

Pack	Cat.No.	Keyswitches
1	0 770 73	3-position switch Changeover switch with OFF position 6 A - 250 V ± RONIS key no. 601 Key can be removed in all 3 positions White
2 modules		
1	0 770 72	2-position switch By changeover contact 6 A - 250 V ± RONIS key no. 601 Key can be removed in both positions White
1	0 766 01	Emergency stop mushroom head push-buttons With key NO + NC 3 A - 250 V A Unlock with RONIS key no. 455 2 modules 22,5 x 45 mm
1	0 766 02	1/4 turn NO + NC 3 A - 250 V A 1/4 turn unlocking 2 modules 22,5 x 45 mm
1	0 775 96	Micro USB charging dock Cordless micro USB docking station for charging a smartphone 5 V ~ 2.4 A power supply Screen remains visible during charging Equipped with: - a lateral USB port for an additional device - a smartphone clamp-holder with a non-slip and anti-scratch finish coat Possible to charge an iPhone by using the micro USB Lightning adaptor iPhone is a registered Apple brand The accessory is not supplied with the product White
1	0 775 97	Support for portable device during charging Multigang installation with 2xUSB charger or with a 2P+T and a mobile charger Flat frame does not require a wall shutter box (fix using screws or adhesive on all surface) Prevents device from any risk of falling and allows secure use of device while charging Wall-mounting clamp For 1 portable device White

Mosaic™
call units



Pack	Cat.No.	Call units to be equipped
1	0 766 55	6-direction modules Used to create call panels according to requirements 6 modules With integrated power supply 127/230 V A - 50/60 Hz For external 12 V SELV power supply (not provided)
1	0 766 57	6-direction transfer unit 6 directions For remote transfer of calls 6 modules
1	0 766 56	Component for call unit NO/NC contact - 2 A Equipped with cord, length 2 m With 12 mm fixed-pitch for 2P socket Cat.No 0 771 50
10	0 783 62	Socket outlet 2P ELV screw terminals Automatic terminals - Antimicrobial ⁽¹⁾ 1 module
10	0 771 50	Table control unit Takes up to 6 display units Cat.No 0 766 60 Horizontal or vertical mounting Dim.: 310 x 295 x 75 mm 36 modules
1	0 782 14	



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