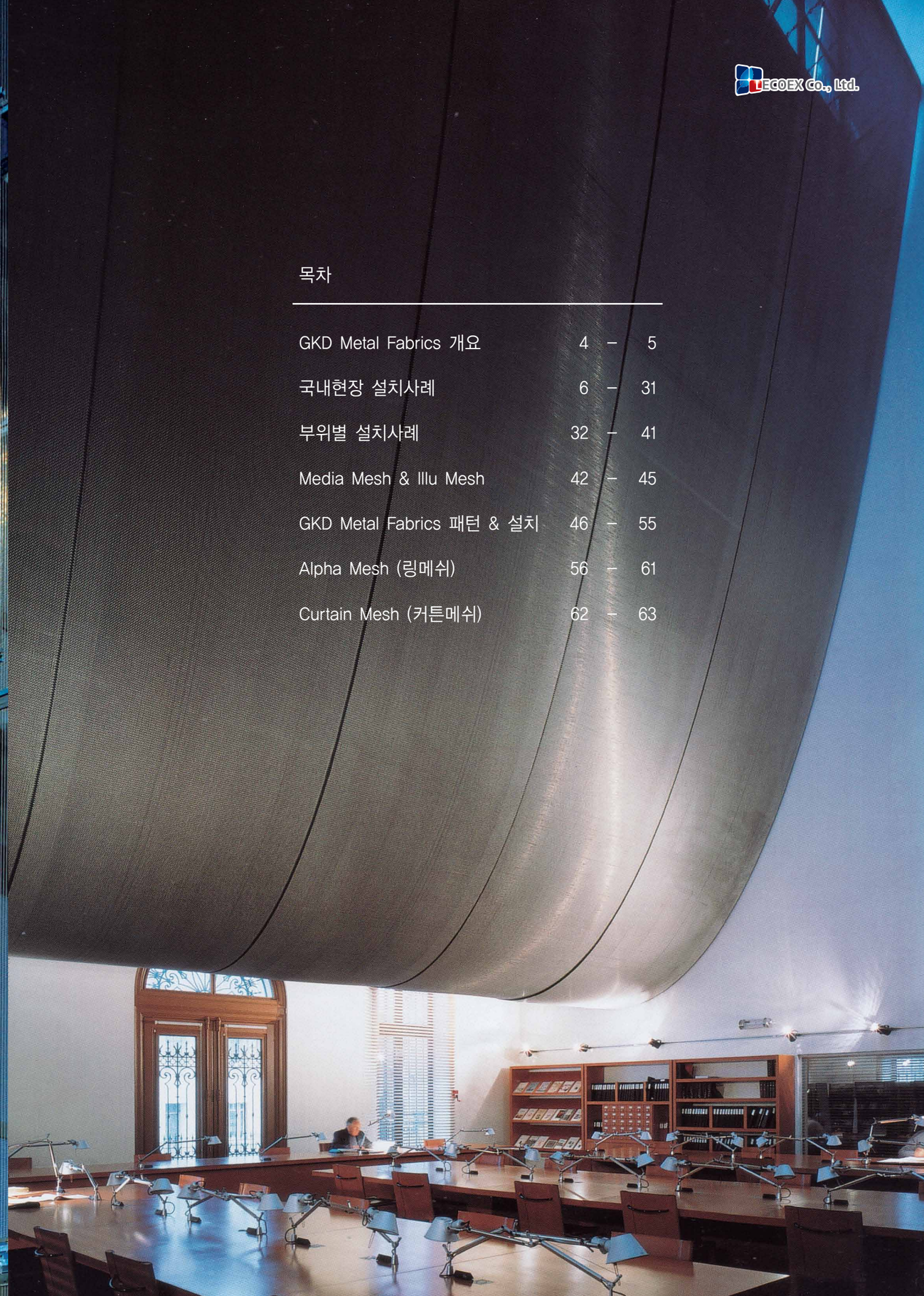
GKD
World Wide Weave

creative weave

(주)레코엑스
LECOEX

www.lecoex.com



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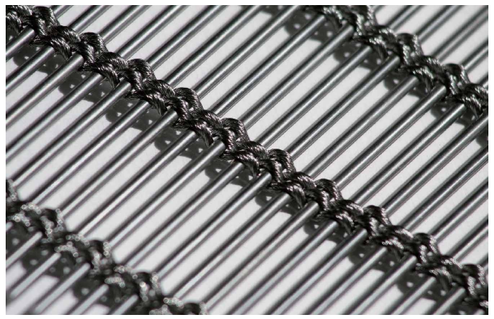
건축과 디자인을 위한 발견

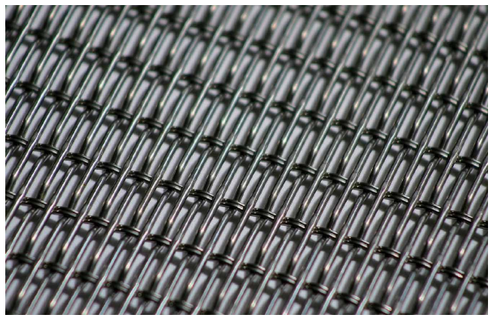
- 메탈패브릭은 빛의 다반사를 이용하여 시각적 효과를 얻기 위한 결과물로서, 건축과 디자인 분야용으로 개발되었습니다.
- 메탈패브릭의 매력은 주변 색상을 흡수하여 이를 다시 반사한다는 것입니다.
- 하루의 시간 때에 따라, 그리고 빛의 밝기에 따라 항상 변화하는 효과를 보여줍니다.

빛과 반사

- 와이어 메쉬는 지름 0.1 ~ 0.2mm의 연선을 사용하여 직조 됩니다.
- 인공조명이나 자연광의 간섭으로 인위적인 또는 자연 그대로의 반사 효과를 끊임없이 만들어 냅니다.

패턴과 그 효과





- 일반적으로 어떤 패턴을 선택 하느냐에 따라 표면의 질감이 결정되며 시각적 효과도 달라집니다.

“metallic fabrics for architecture and design”

“디자인의 세계를 위해 개발 및 재 정의된 전통 소재”

건축가와 그들의 건축물

Metallic fabrics(메탈패브릭)는 일반 와이어철망과는 달리 스테인레스 와이어로프(Wire rope)와 선재(Rod bar)를 혼합하여 직조하는 방식으로 고내식성 강종인 SUS316L을 사용하여 내구성이 뛰어납니다.
다양한 디자인 형태와 간편한 시공성, 조명 및 태양빛에 따른 건물의 다양한 변화는 건축 디자인의 새로운 아이템이 되었고, 세계적인 건축가들이 다양한 프로젝트에 과감하게 사용하였으며, 현재도 많은 건축물에 다양한 부위에 걸쳐 적용되고 있습니다.

“The poetic and abstract solution”

Dominique Perrault 도미니크 페로

건축이란 무엇인가를 보여주려는 의도이다

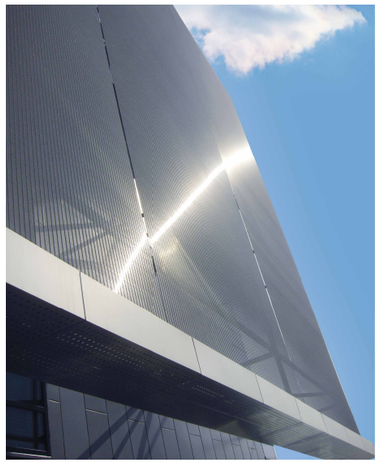
Metallic fabrics(메탈패브릭)는 100여년전 독일의 Duren이라는 마을에서 금속필터망을 직조하는 것으로 시작되었습니다.
가내수공업형태의 금속직조분야가 산업용으로 특화되어 개발되었고 또다시 건축자재로써 특화된 분야로 진출하여 축적된 기술에 꾸준한 개발이 더해지면서 최상의 디자인과 품질을 만들어 내고 있습니다.
건축 디자인용 와이어 메쉬는 제품 자체의 품질을 검토하는 기준 잣대가 모호한 부분이 있기 때문에 우리는 크게 세 가지의 제품의 품질을 인정하는 조건을 가지고 있습니다.
첫째, 직조시의 전자동 유압기로 제작하는가.
둘째, 직조 전 와이어를 세척작업 후 직조가 가능한가.
셋째, 직조 후 장력테스트 시스템을 거친 후 출하 되는가.
기본적으로 이 세 가지가 지켜지지 않는다면, 건축에 적용하는 디자인 개념의 이 소재는 그저 산업용 필터망으로 취급 받을 수 밖에 없습니다.

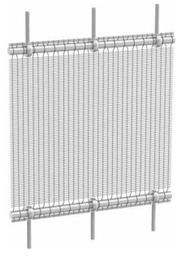
워커힐 W 호텔

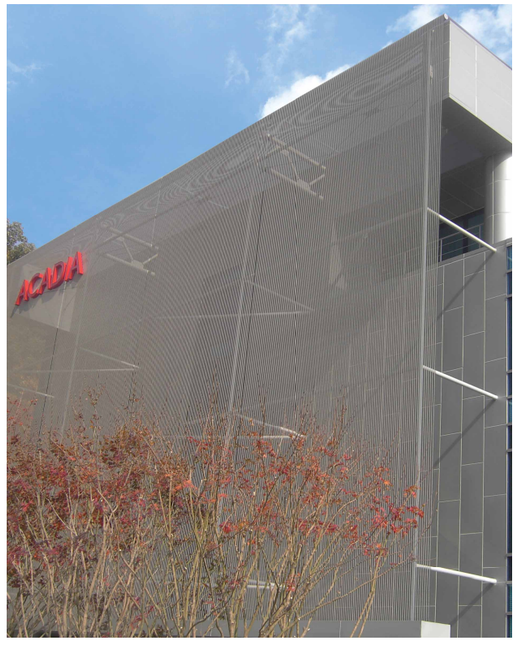
Location : 서울시 광진구 광장동

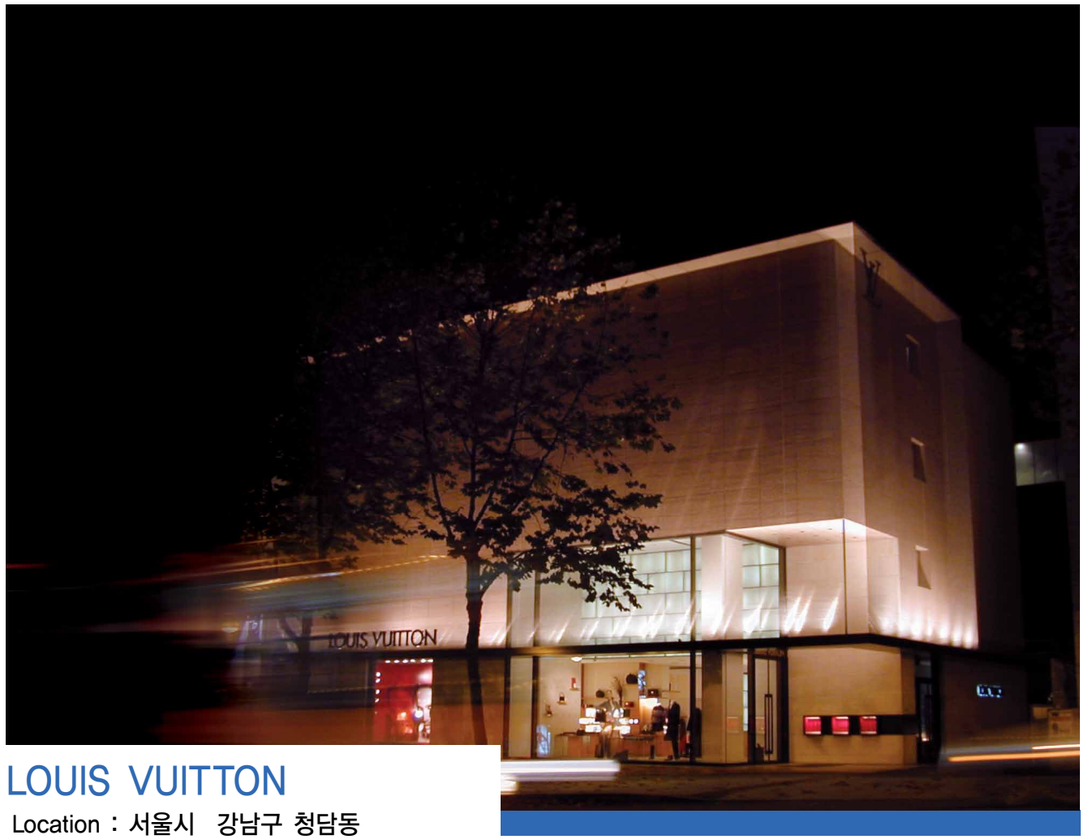
Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40 %

WALKERHILL W HOTEL







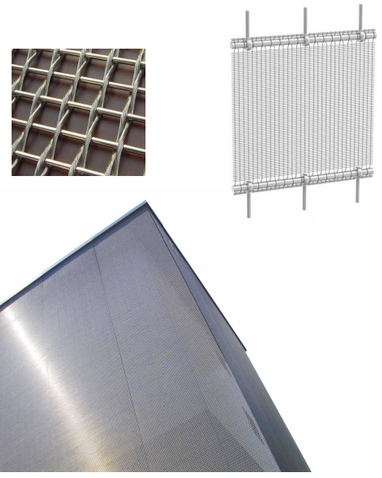


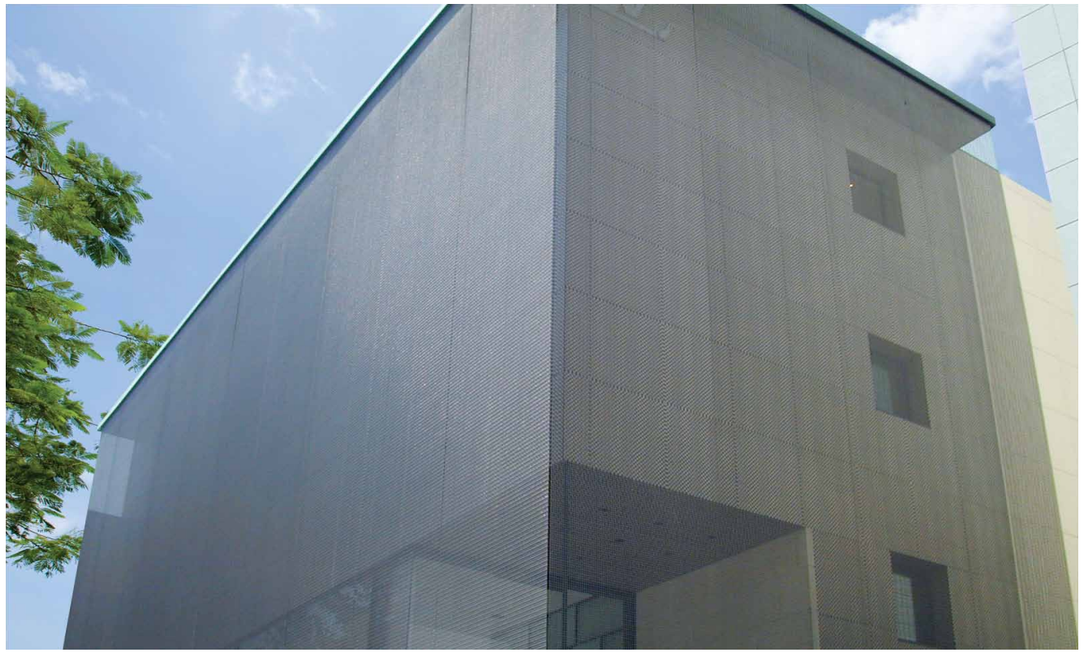
LOUIS VUITTON

Location : 서울시 강남구 청담동

Product : LV – Type
Attachment : Woven–in bar with eyebolt
Open Area : 56 %

LOUIS VUITTON



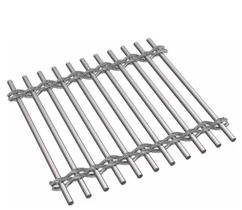


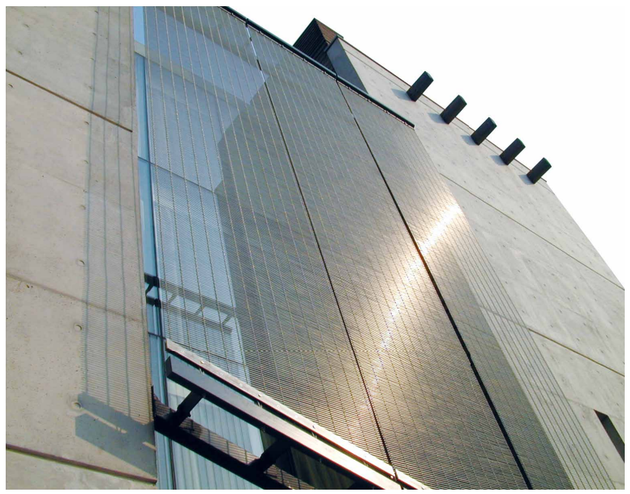
이란대사관

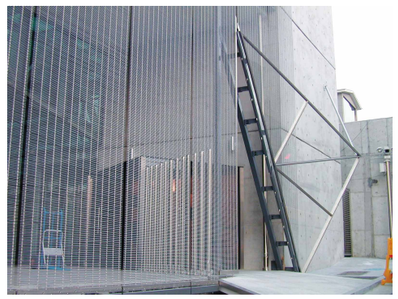
Location : 서울시 용산구 동빙고동

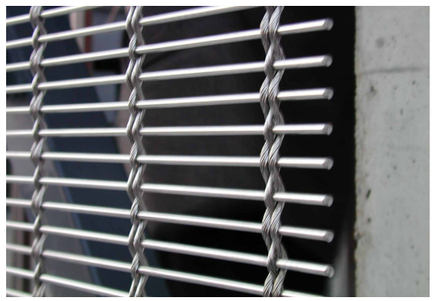
Product : Futura3110
Attachment : Flats with clevis
Open Area : 65.9%

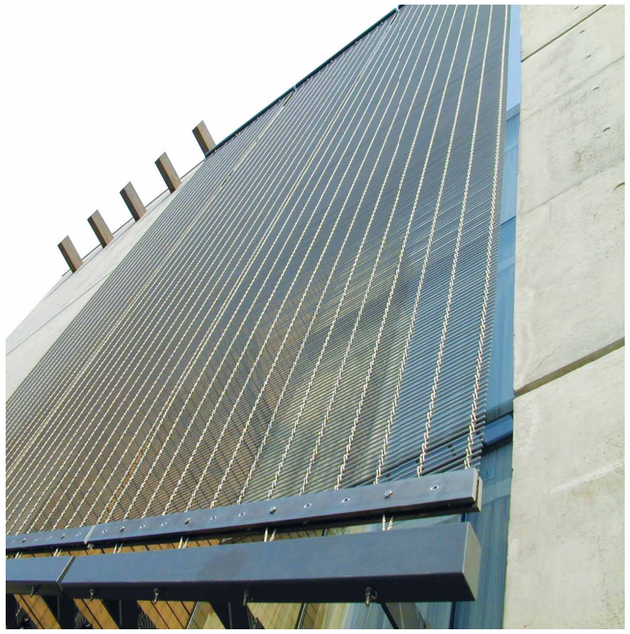
IRAN EMBASSY

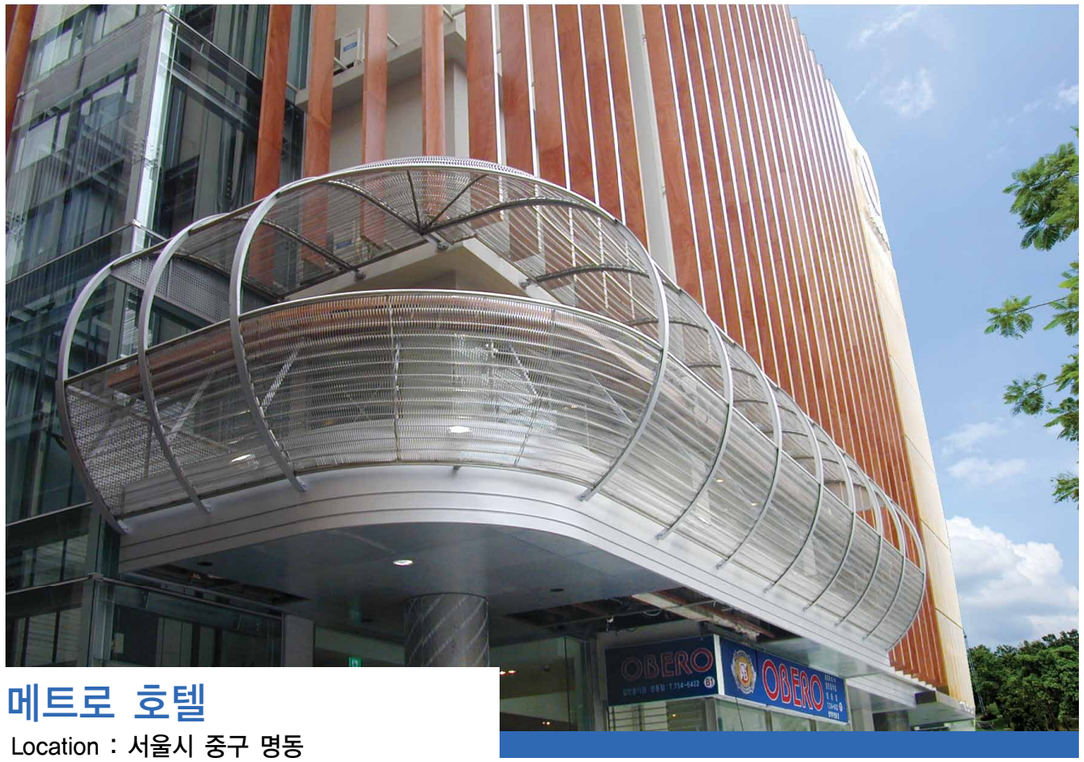








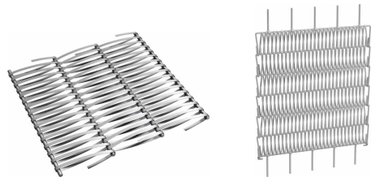




메트로 호텔

Location : 서울시 중구 명동

Product : Escale 7x1
Attachment : Eyebolt
Open Area : 50%

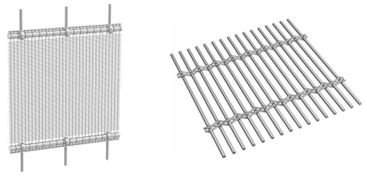


METRO HOTEL

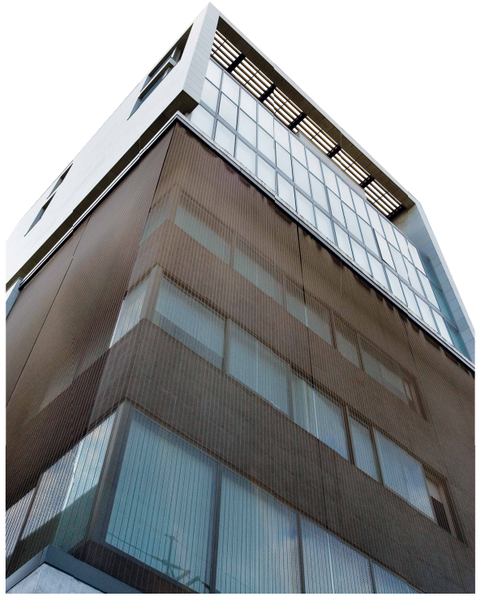
역삼 JJ 빌딩

Location : 서울시 강남구 역삼동

Product : Tigris
Attachment : Woven-in bar with eyebolt
Open Area : 62.1%



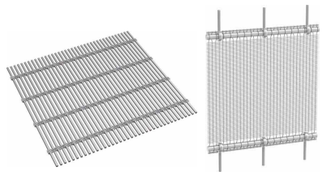
YEOKSAM JJ BUILDING



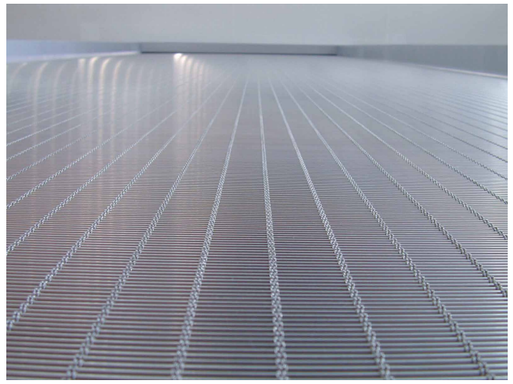
현대 산업개발 모델하우스

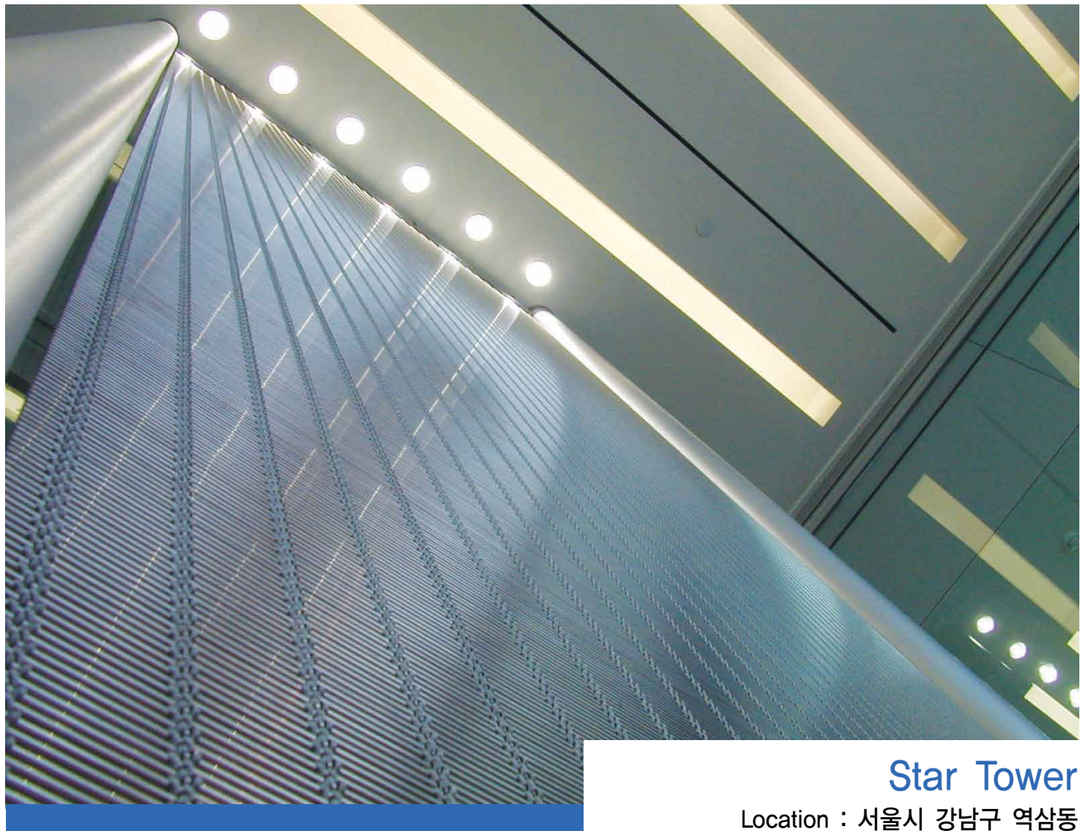
Location : 경기도 화성군 동탄읍

Product : Lago
Attachment : Woven-in bar with eyebolt
Open Area : 44%



HYUNDAI DEVELOPMENT COMPANY

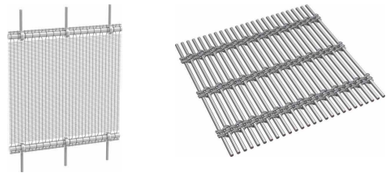




Star Tower

Location : 서울시 강남구 역삼동

Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40%

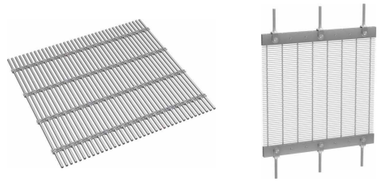


STAR TOWER

APEC 컨벤션 센터

Location : 베트남 하노이

Product : Lago
Attachment : Flats with clevis
Open Area : 44%

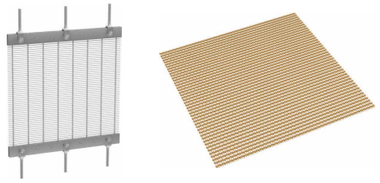


APEC CONVENTION CENTER

APEC 컨벤션 센터

Location : 베트남 하노이

Product : Mandarin
Attachment : Flats with clevis
Open Area : 37.2%

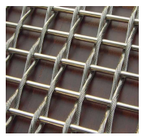


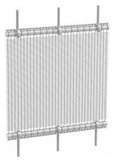
APEC CONVENTION CENTER

PAX Tower

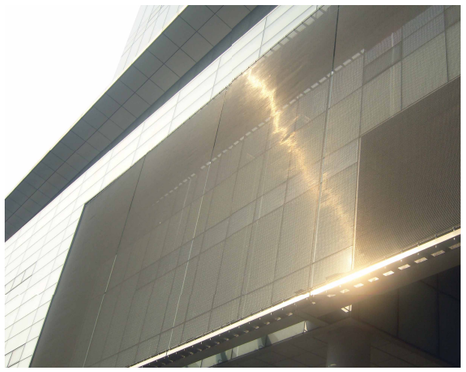
Location : 서울시 강남구 역삼동

Product : LV – Type
Attachment : Woven–in bar with eyebolt
Open Area : 56%





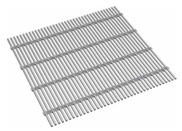
PAX TOWER



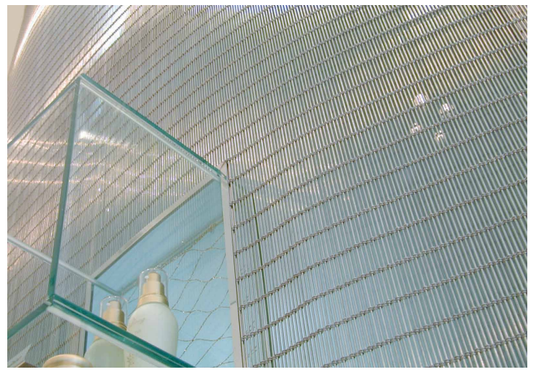
화진 화장품

Location : 서울시 강남구 삼성동

Product : Lago
Attachment : Woven–in bar with eyebolt
Open Area : 44%



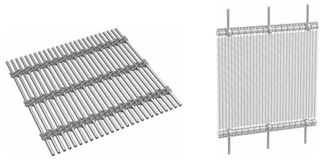
HWAJIN COSMETICS



두산 타워

Location : 서울시 중구 을지로6가

Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40%

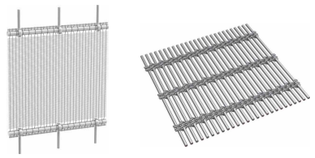


DOSAN TOWER

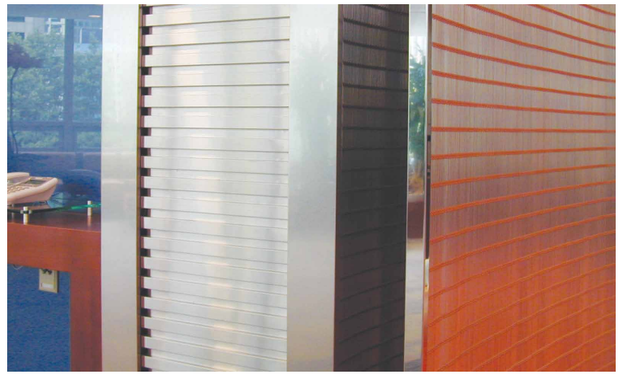
Posco Business Center

Location : 서울시 강남구 삼성동

Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40%



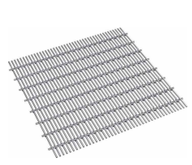
POSCO BUSINESS CENTER

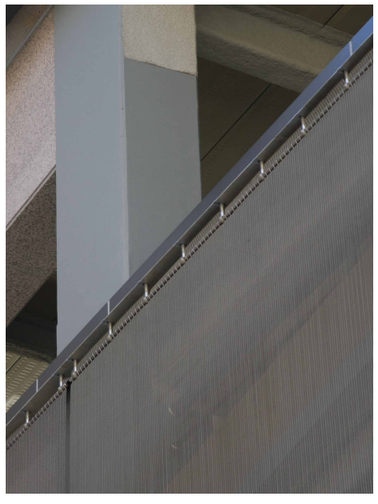


워커힐호텔 주차장 리모델링

Location : 서울시 광진구 광장동

Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40%



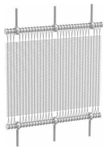


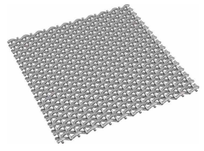
WALKERHILL W HOTEL

불탑빌딩

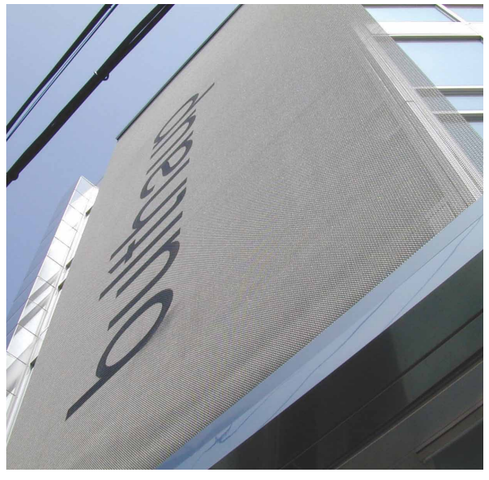
Location : 서울시 강남구 청담동

Product : Baltic
Attachment : Woven-in bar with eyebolt
Open Area : 43%





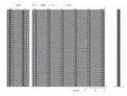
BULTOP BUILDING



타워팰리스

Location : 서울시 강남구 도곡동

Product : Tatami
Attachment : Flats with clevis
Open Area : 5%



TOWER PALACE

삼성래미안 주택 문화관

Location : 서울시 종로구 운니동

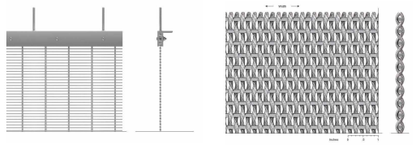
Product : Futura3110
Attachment : Woven-in bar with eyebolt
Open Area : 65.9%

SAMSUNG RAEMIAN
HOUSING CULTURE CENTER

성북동 S주택

Location : 서울시 성북구 성북동

Product : Ocean
Attachment : Flat & angle, threaded rod
Open Area : 21%

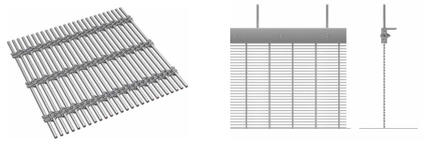


SUNGBUK-DONG S HOUSING

광진 문화 예술 회관

Location : 서울시 광진구 자양동

Product : Sambesi
Attachment : Flat & angle, threaded rod
Open Area : 40%

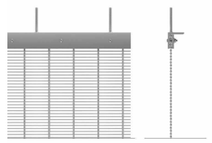


GWANGJIN
CULTURE ART CENTER

부산 상호 저축 은행

Location : 서울시 강남구 논현동

Product : Sambesi
Attachment : Flat & angle, threaded rod
Open Area : 40%

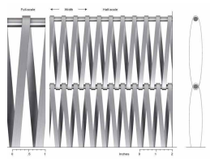


BUSAN MUTUAL SAVINGS BANK

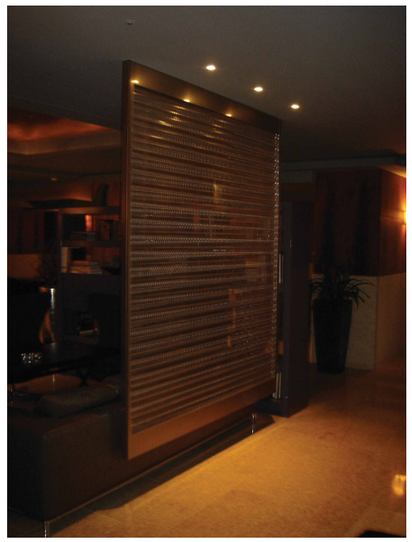
리츠칼튼 호텔

Location : 서울시 강남구 역삼동

Product : Escale 7x1
Attachment : Eyebolt
Open Area : 50%



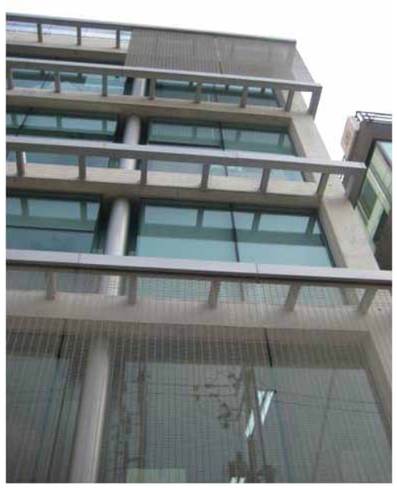
RITZCARLTON HOTEL



삼성동 근린시설

Location : 서울시 강남구 삼성동

Product : Sambesi
Attachment : Woven-in bar with eyebolt
Open Area : 40%

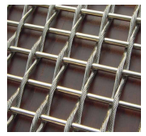


SAMSUNG-DONG
NEIGHBOURHOOD LIVING FACILITY

신세계 백화점

Location : 서울시 영등포구 영등포동

Product : LV - Type
Attachment : Woven-in bar with eyebolt
Open Area : 56%



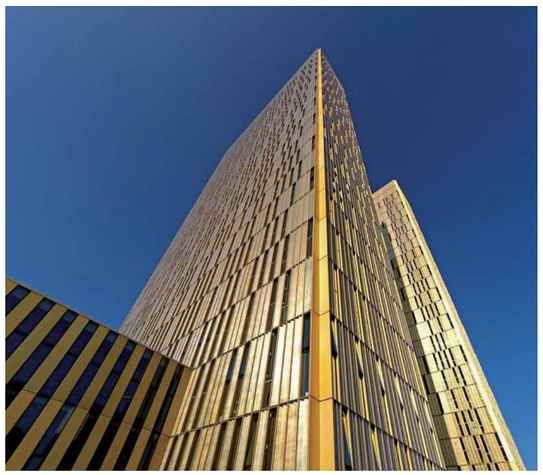
SHINSEGAE DEPARTMENT

건물 외벽

LECOEX Co., Ltd.
BUILDING OUTER WALL

The home of FIFA, Switzerland Zurich

The home of FIFA, Switzerland Zurich



Cour de justice, Luxembourg

Expomedia, Germany

Water-tower-Arctura, Oestersund Sweden

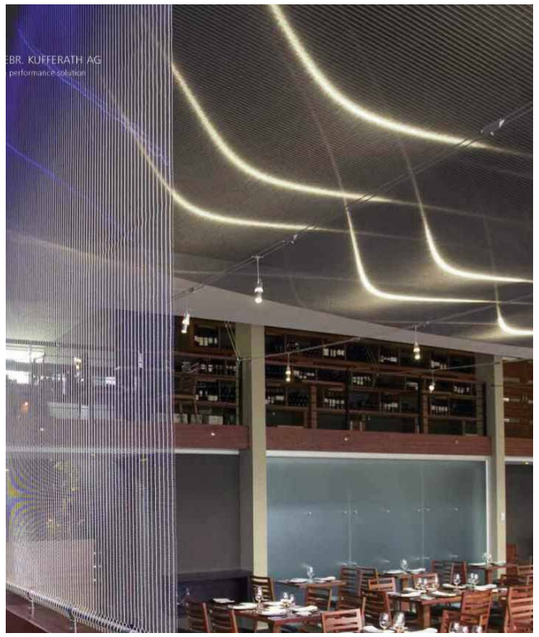
Louis Vuitton, Paris

Partition Wall

National Grand Theatre, Beijing China

National-Grand-Theater, Beijing China

Restaurant Taku Cologne, Germany

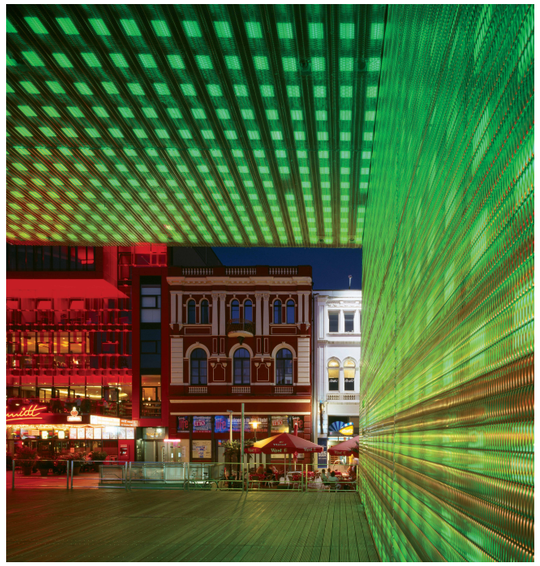


Hotel Hilton Athen

UCLA Men's Gym, Los Angeles, CA

LECOEX Co., Ltd.
PARTITION WALL

Renault Exhibit, Geneva Switzerland



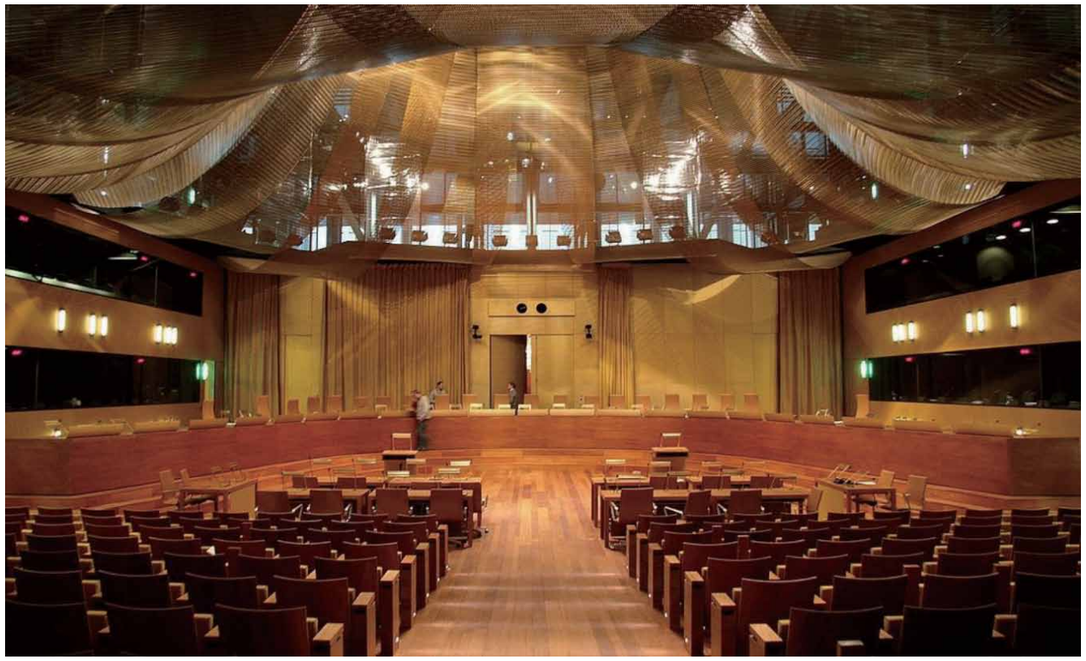
Spielbudenplatz, Hamburg Germany

천정재

Henderson, Las Vegas, NV

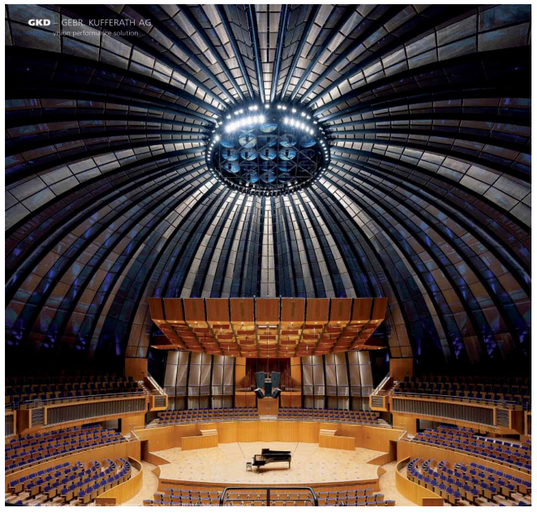
Gross-Umstadt Town Hall, Germany

Trianon-Building, Frankfurt Germany

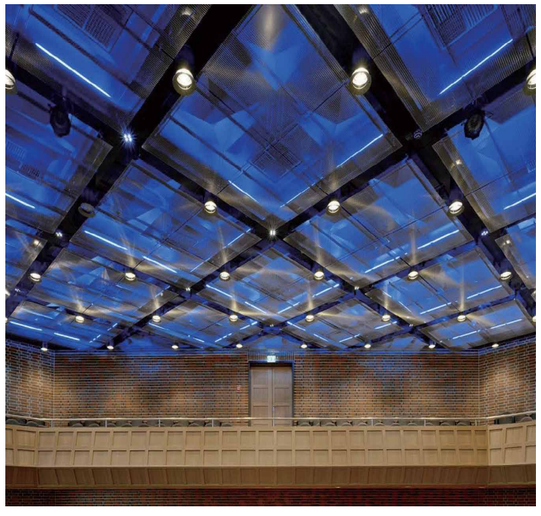


Cour de justice, Luxembourg

LECOEX Co., Ltd. CEILING MATERIALS



Tonhalle, Du"sseldorf, Germany



Dusseldorf Concert Hall, Germany

3차원 Exterior

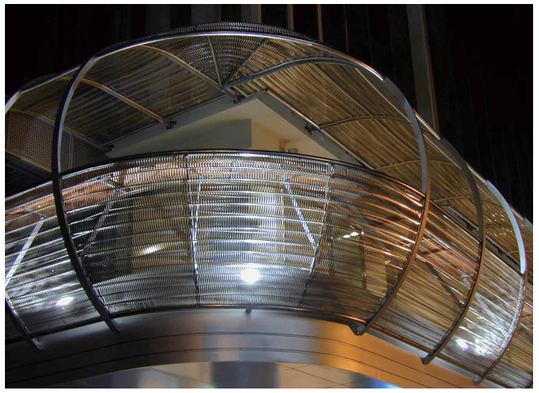
MaisonFolie Lille-Wazemmes, France

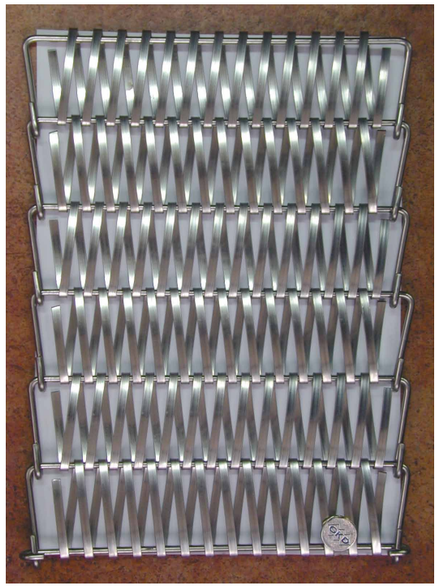
LECOEX Co., Ltd. THREE DIMENSIONS EXTERIOR

Bertelsmann Planet-M, Expo 2000, Hannover

Children's Palace, Guangzhou China

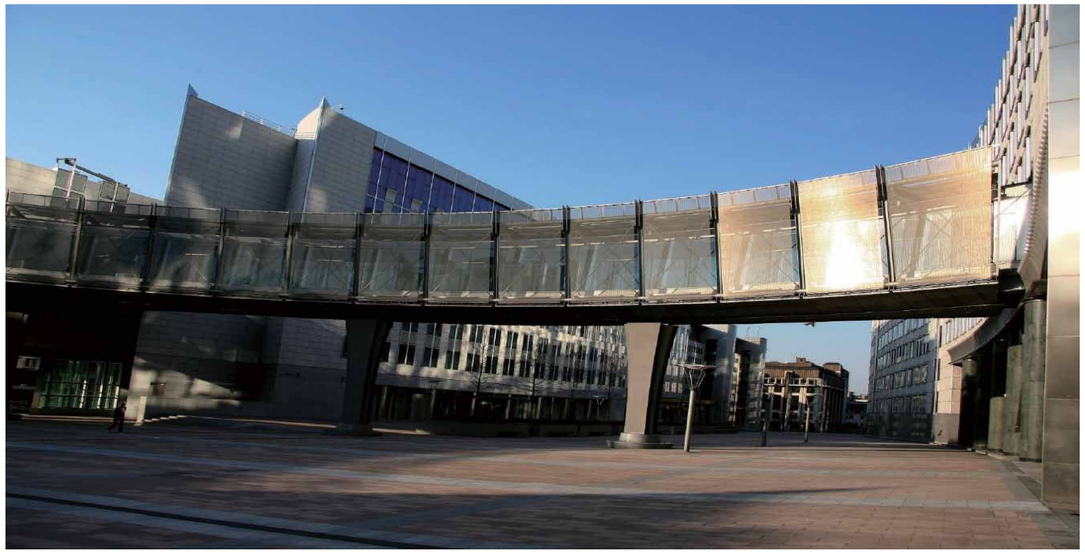
North Avenue Bridge, Chicago, IL





LECOEX Co., Ltd. THREE DIMENSIONS EXTERIOR

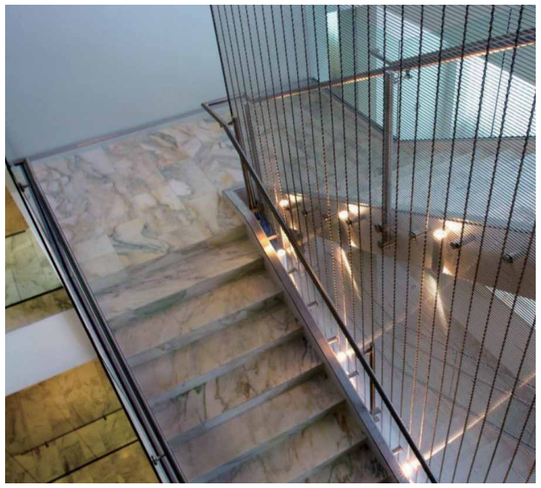
A good many others (난간,기둥,바닥..)



European Parliament, Brussels

LECOEX Co., Ltd. A good many others

Puente de Arganzuela, Madrid



Phelps Dunbar, Houston,USA

Staircase and Elevator Enclosure, Germany

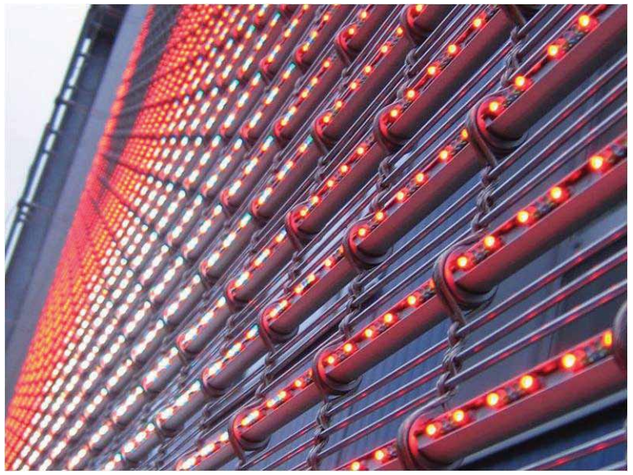
LECOEX Co., Ltd. A good many others

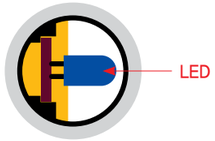
Remault Exhibit, Geneva Switzerland

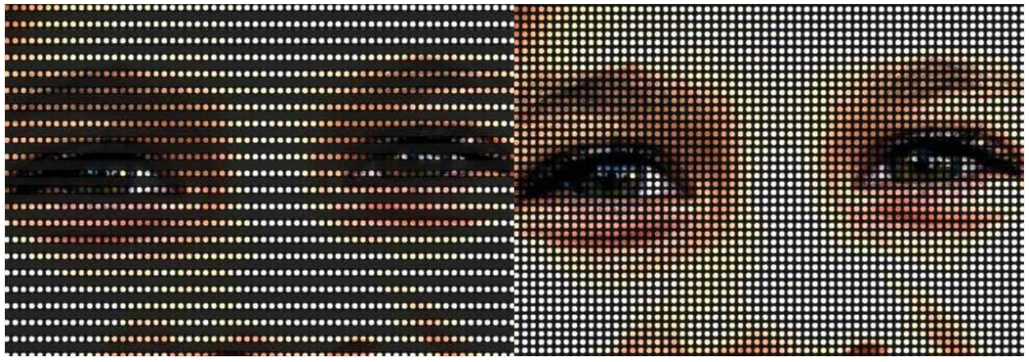
Media Mesh(미디어메쉬)

미디어메쉬란 메탈패브릭에 있어 세계 최고인 독일 GKD사와 미국의 LED 전문업체 Ag4사가 공동으로 개발하여 전세계에 특허를 출현한 제품입니다. 건물에 전광판을 설치할 경우 전면이 차단되어 뒷면의 외관을 가리던 것과는 달리 미디어메쉬는 설치 후에도 내부에서 외부를 볼 수 있다는 이점이 있습니다. 따라서 옥상에 있던 전광판이 건물 외벽으로 내려오면서 커튼월 유리부분에도 설치가 가능해졌습니다.

쉽게 설명하자면 메탈패브릭이라는 소재 사이사이에 LED관을 삽입하고 컨트롤 박스를 설치하여 원하는 칼라 및 동영상 구현까지도 가능하게 만든 제품입니다. TV에도 화소수가 있듯이 선명하기의 차이는 LED 간격에 따라 다른데 이 또한 자재의 단가 차이에 큰 영향을 미치므로 설계 반영시 신중한 선택이 필요하겠습니다.



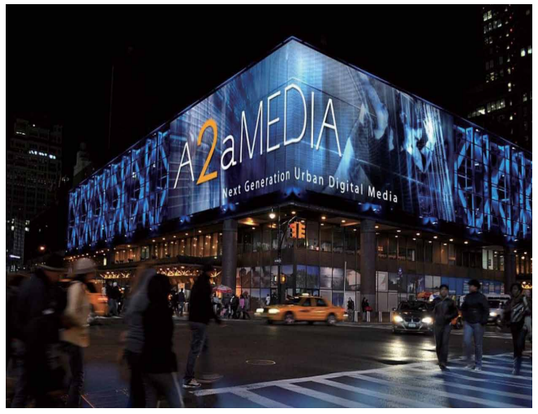




LED 개수에 따른 화소의 차이

금속과 전자가 만나 개발된 첨단 기술의 MEDIA MESH 입니다.
– 이 소재는 건축학적 미와 광고의 효과를 획기적으로 이끌어나가는 첨단소재로서 전세계의 이목을 끌고 있습니다.

American Airlines Arena (Miami, FL)

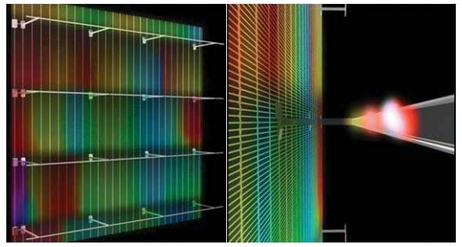


Port Authority, NYC

Port Authority, NYC

Illumesh(일루메쉬)

일루메쉬란 신소재 건축물에 유행처럼 번지고 있는 LED를 건물에 쉽게 적용시킨 소재입니다. 낮에는 메탈 느낌의 메쉬가 기본으로 보이고 밤에는 LED 조명의 칼라 변화에 따라 여러 가지로 달라지는 건물의 느낌을 표현하는 것이 특징입니다. 동영상 구현처럼 디테일한 표현은 어렵지만 시간의 변화에 따른 건물 의 다양한 변화를 경험하실 수 있습니다.



일루메쉬와 미디어메쉬의 가장 큰 차이는 미디어메쉬는 메탈패브릭 사이에 LED 조명이 삽입되어 앞쪽으로 영상을 보내주는데 반해 일루메쉬는 아래 사진에서처럼 LED관이 메쉬 바깥에 설치되어 메쉬쪽으로 조명을 비추어 주는 형태입니다.
미디어메쉬처럼 화소수의 영향을 크게 받는 제품이 아니므로 비용의 절감 효과가 큰 제품입니다.

금속과 전자가 만나 개발된 첨단 기술의 ILLUMESH 입니다 .
– 이 소재는 건축학적 미와 광고의 효과를 획기적으로 이끌어나가는 첨단소재로서 전세계의 이목을 끌고 있습니다.

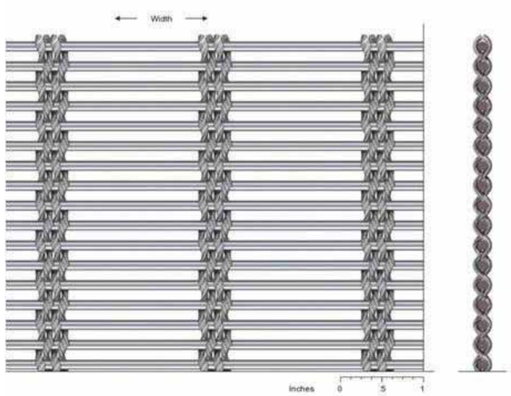
Indemann, Germany

Ticon, Tripoli, Istabul

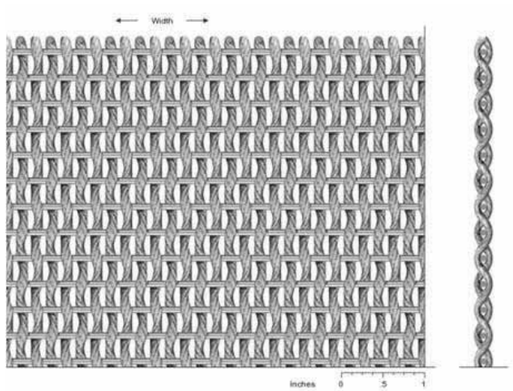
METALLIC FABRICS 규격 및 용도

재 질 Metal Fabric은 패턴에 따라 각각의 제품 명칭이 있음.
구 조 특수 처리된 표면 SUS316L Wire Rope + Rod Bar의 혼합직조 구조
규 격 Width : Max 8,000mm x Height : Max 50,000mm
납 기 항공편 이용 시 3주 / 선박 선적 시 8주 소요
용 도 Facade, Image Wall, Floor, Ceiling, Column cover, ...

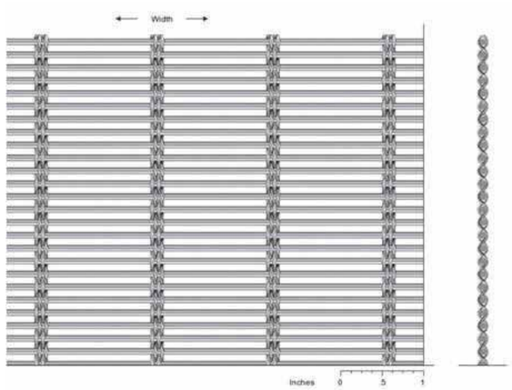
METALLIC FABRICS PATTERN



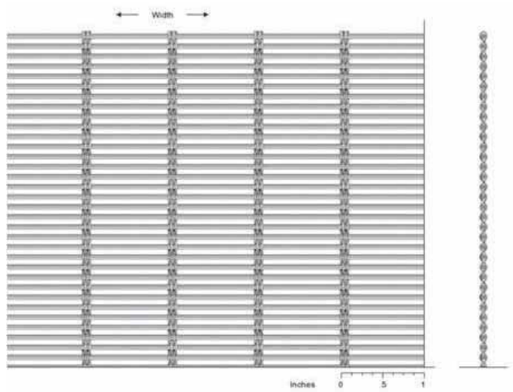
Design Sambesi
Open area 40% Weight 11.2kg/m2



Design Baltic
Open area 43% Weight 7.8kg/m2

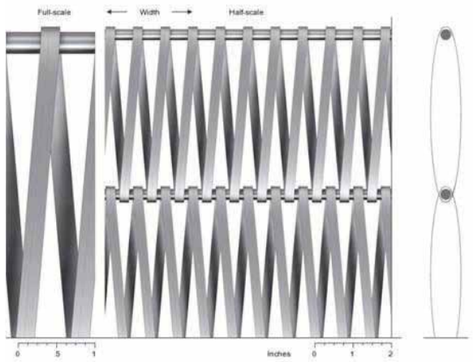


Design Lago
Open area 44% Weight 6.8kg/m2

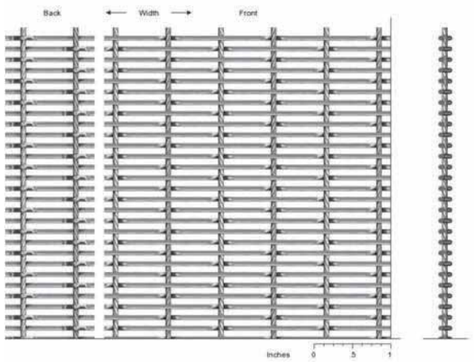


Design Lamelle
Open area 44.3% Weight 5.2kg/m2

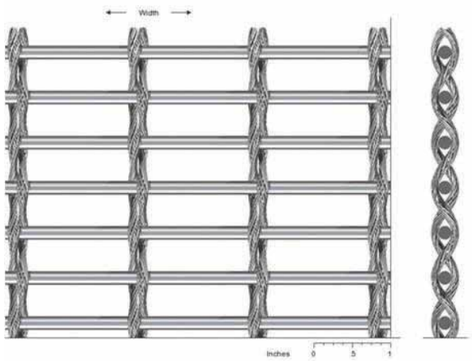
METALLIC FABRICS PATTERN



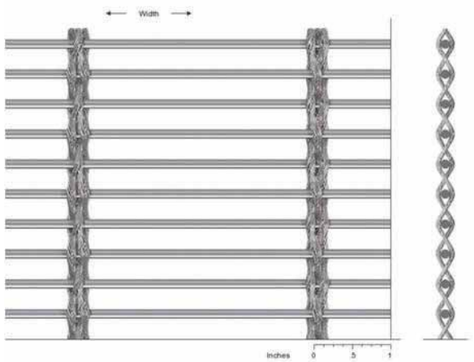
Design Escale 7x1
Open area 50% Weight 8.9kg/m2



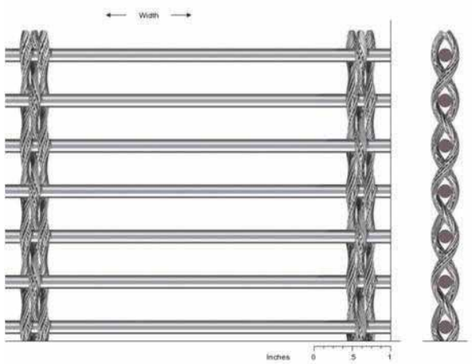
Design Omega 1520
Open area 50.6% Weight 5.2kg/m2



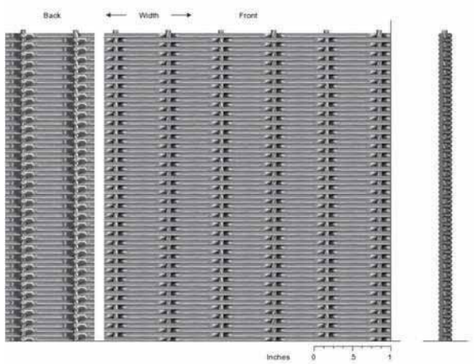
Design Futura 240
Open area 61.5% Weight 9.4kg/m2



Design Tigris
Open area 62.1% Weight 6kg/m2

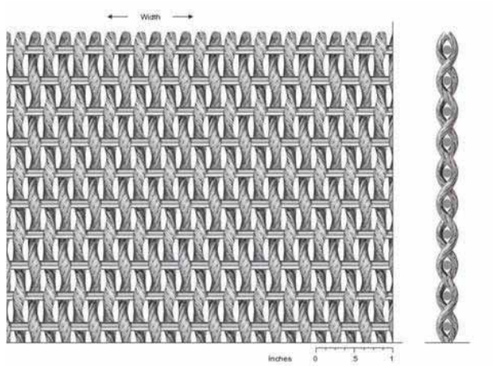


Design Futura 3110
Open area 65.9% Weight 8.5kg/m2

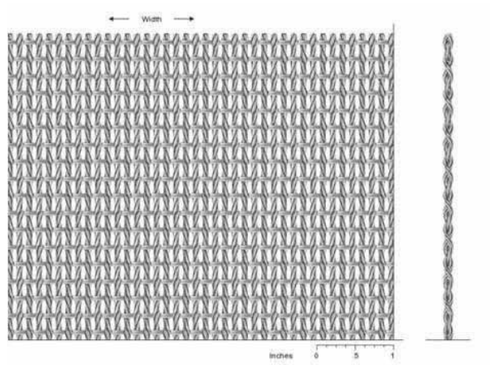


Design Tatami
Open area 5% Weight 10.4kg/m2

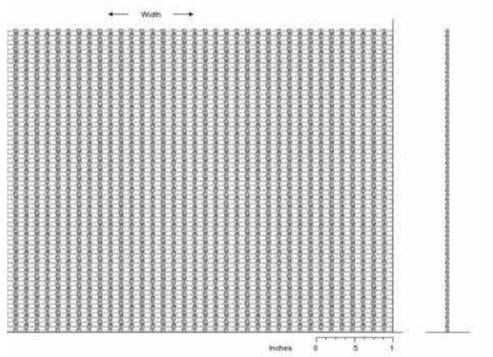
METALLIC FABRICS PATTERN



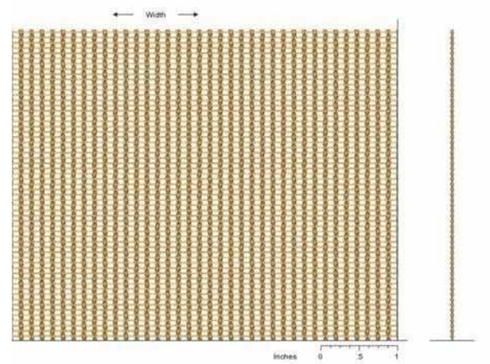
Design Ocean
Open area 21% Weight 14.8kg/m2



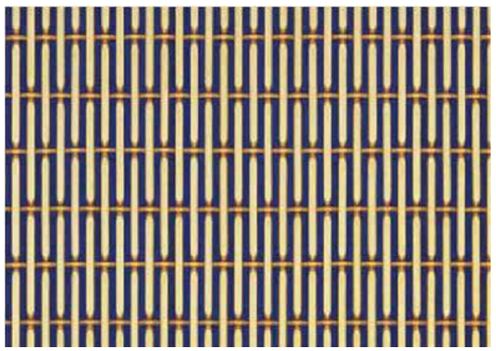
Design Delphin
Open area 31.7% Weight 5.2kg/m2



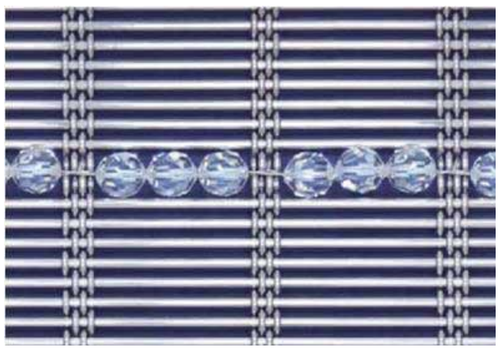
Design Kiwi
Open area 37.2% Weight 2.3kg/m2



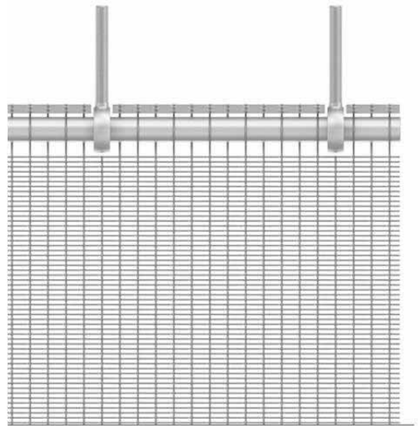
Design Mandarin
Open area 37.2% Weight 2.4kg/m2



Design Alu6010
Open area 45.7% Weight 2.5kg/m2



Design Crystal PC Sambesi
Open area Varied Weight Varied

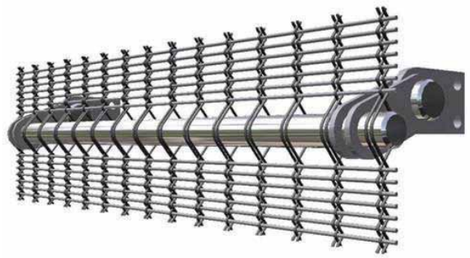


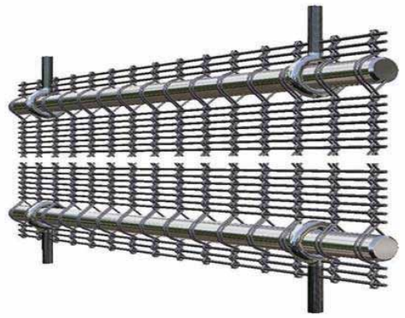
적합한 패턴

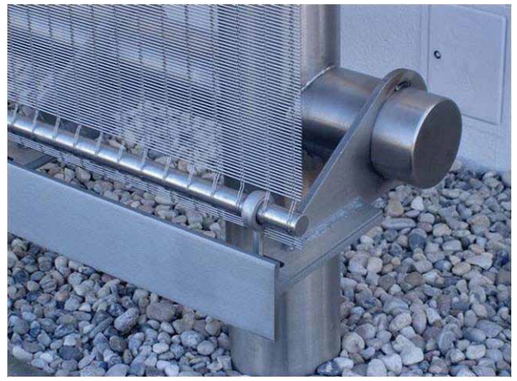
- Futura240
- Futura3110
- Lago
- Lamelle
- Sambesi
- Tigris
- Omega1520

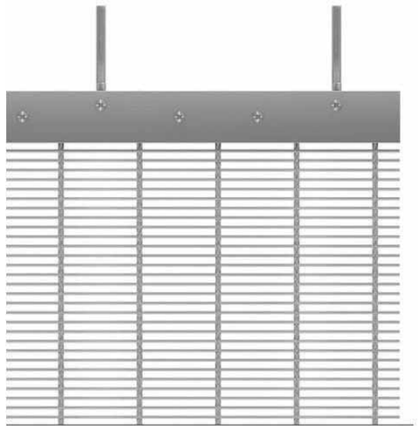
ATTACHMENTS Woven in bar with eyebolt

상,하부를 Welding 한 후 Rod bar 를 홀수로 뺀 자리에 제품 규격에 맞는 Round bar 를 끼워 넣고 Eye bolt 를 이용하여 너트로 고정 시키는 방법







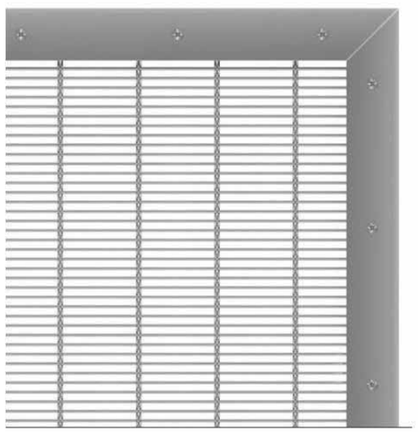


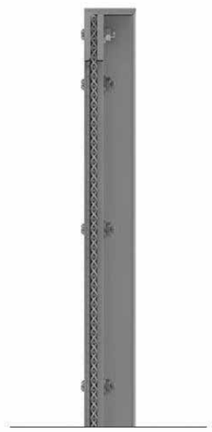
적합한 패턴

Delphin	Omega1510
Futura240	Omega1520
Futura3110	Baltic
Lago	Ocean
Lamelle	
Sambesi	
Tigris	

ATTACHMENTS Flats with flat_eye

Flat bar 를 이용하여 mesh 를 고정한 후 Threaded rod 를 Welding 으로 고정하는 방법



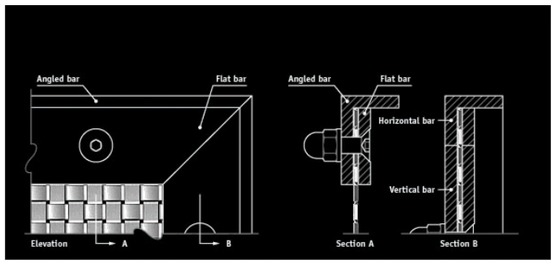


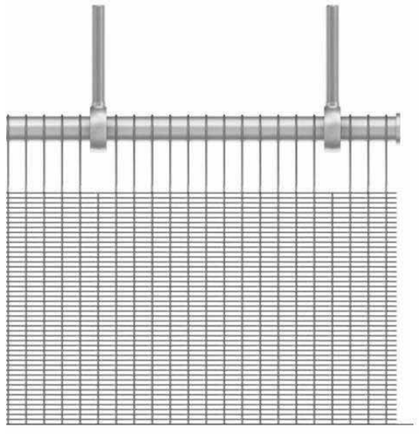
적합한 패턴

Delphin	Omega1510
Futura240	Omega1520
Futura3110	Baltic
Lago	Ocean
Lamelle	
Sambesi	
Tigris	

ATTACHMENTS Frame

Stainless Flat bar 를 가공하여 Mesh 마감부가 노출되지 않게 결합한 후 액자와 비슷한 Frame 만으로 고정을 하는 방법



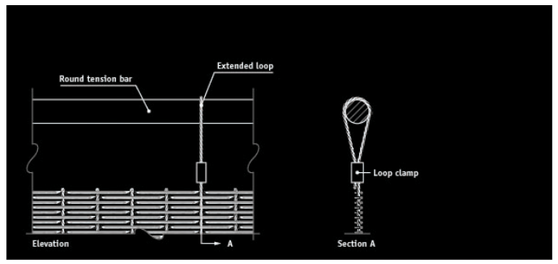


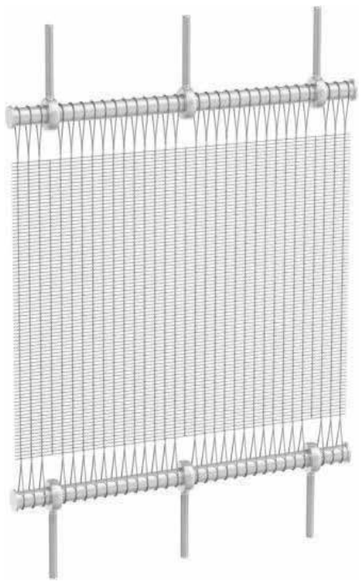
적합한 패턴

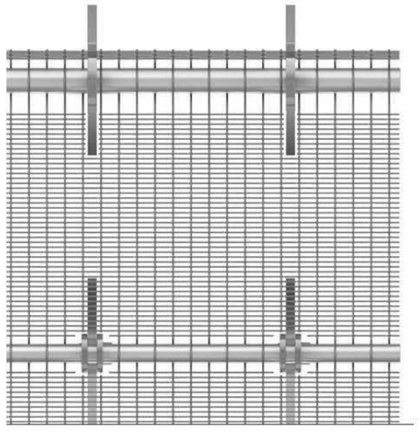
- Futura3110
- Tigris
- Lamelle
- Lago
- Sambesi
- Omega

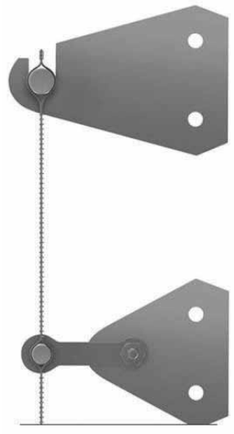
ATTACHMENTS Extended loop

Wire Rope 를 길게 이용하여 환봉에 감아서 Loop Clamp 로 단단히 고정 시킨 후 환봉을 당겨 Tension 을 주는 고정방법







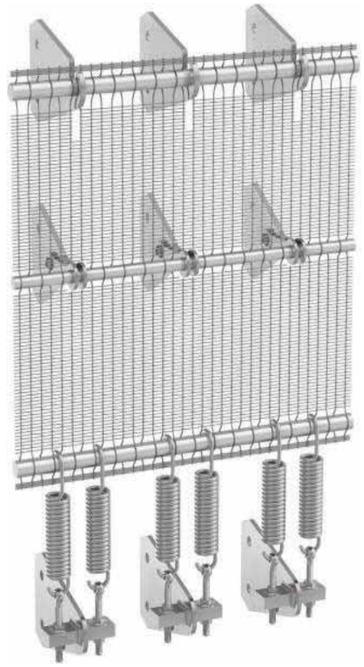


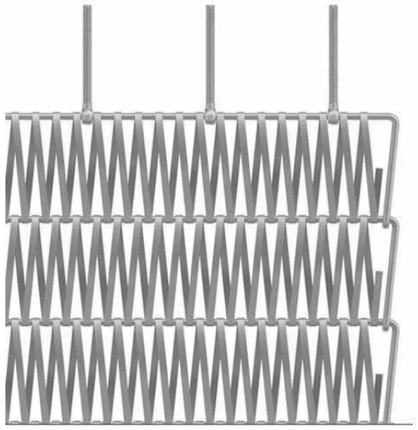
적합한 패턴

- Futura240
- Futura3110
- Lago
- Lamelle
- Sambesi
- Tigris
- Omega1520

ATTACHMENTS Woven-in bar with spring

상하부를 Welding 한 후 Rod bar 를 홀수로 뺀 자리에 Round bar 를 끼워 넣고 Spring 을 결합해 Tension 을 준 고정방법



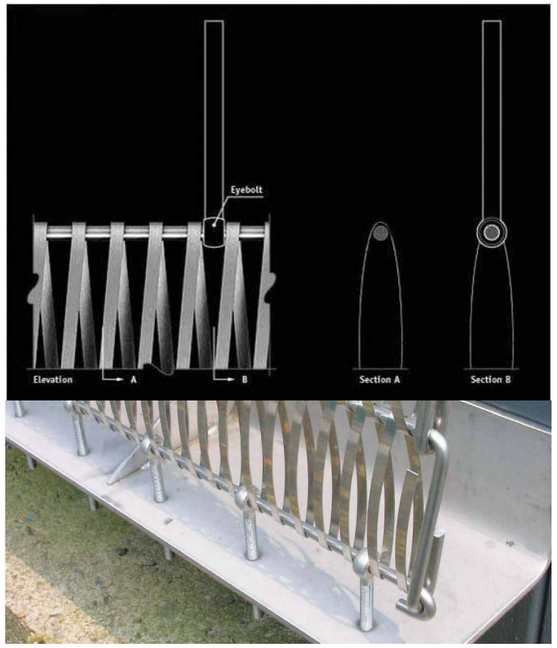


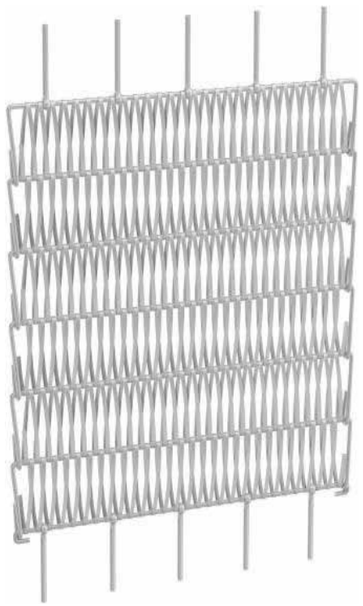
적합한 패턴

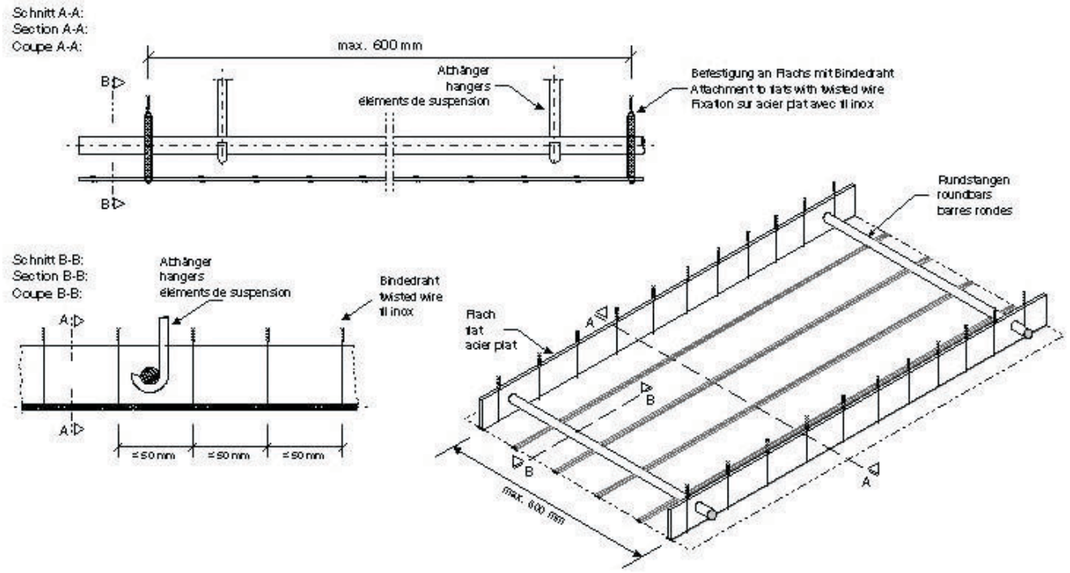
Escale

ATTACHMENTS Eyebolt

Escale 에 있던 환봉에 Eyebolt 를 이용하여 구조체에 고정하는 방법 (다양한 곡면 표현 가능)



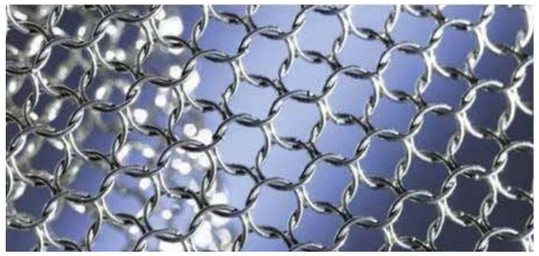


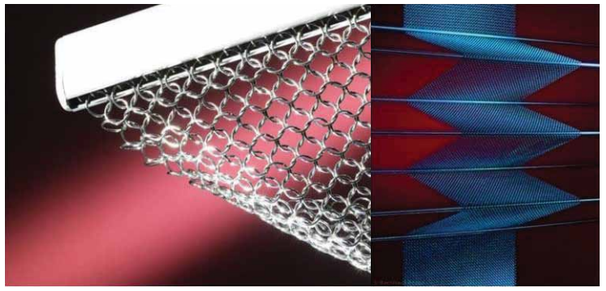


ATTACHMENTS Flats with clevis

AlphaMesh(알파메쉬) alphamesh®

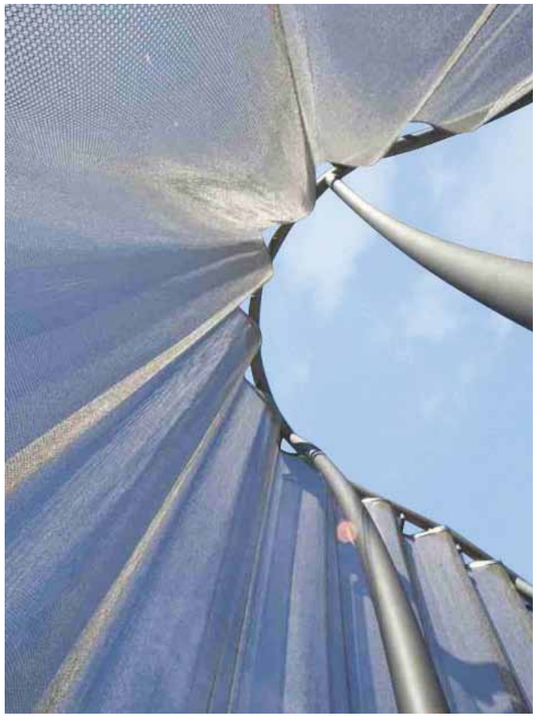
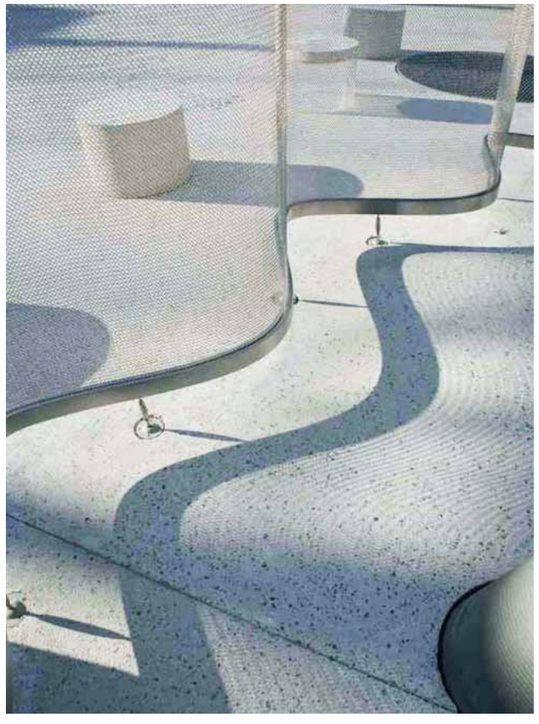
알파메쉬란 독일의 ProMesh GmBH 사에서 제작한 신소재 메쉬입니다. 간단히 링메쉬라고도 하며, 여러가지 크기의 링을 상하좌우로 연결하여 제작된 메쉬입니다. 기존의 메쉬는 평면적이고 딱딱하여 3차원 건물에 적용시키기 어려운 점이 많이 있었으나 알파메쉬의 탄생으로 3차원 건물 외벽에 자유롭게 메탈 느낌의 메쉬를 손쉽게 사용할 수 있게 되었습니다. 앞으로 링메쉬의 수요가 크게 늘어날 것으로 기대됩니다.





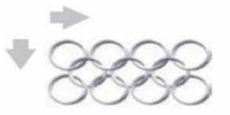
메쉬의 특성상 자유롭게 움직이기 쉬운 소재이므로 간단한 디테일로도 고정이 가능하고 아래 사진처럼 뭉쳐서 표현하면 다양하고 획기적인 뷰를 연출할 수도 있는 소재입니다.

alphamesh®

ring diameter
⌀ 12.0mm

surface
nature
polished
dull (titanium look)



mesh width ex works
width : 1.00m–9.60m
height : max. 15.00m
other width on request

open area
c. 63%

material
stainless steel
X2 CrNiMo 17–12–2
X8 CrMnCuN 17–8–3

tensile Strength
〉c. 51.48 kN / m

weight
c. 3.20 Kg / m²

material
bronze
(copper tin alloy)

tensile Strength
〉c. 34.85 kN / m

weight
c. 3.84 Kg / m²

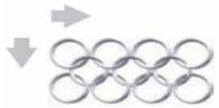
material
stainless steel
bronze

tensile Strength
〉c. 34.85 kN / m

weight
c. 3.60 Kg / m²

ring diameter
⌀ 7.0mm

surface
nature
polished
dull



mesh width ex works
width : 1.00m–5.00m
height : max. 5.00m
other width on request

open area
c. 60%

material
stainless steel
X2 CrNiMo 17–12–2
X2 CrNi 9–11
X8 CrMnCuN 17–8–3

tensile Strength
〉c. 35.74 kN / m

weight
c. 2.20 Kg / m²

material
bronze
(copper tin alloy)

tensile Strength
〉c. 19.24 kN / m

weight
c. 2.5 Kg / m²

Curtain Mesh(커튼 메쉬)

커튼메쉬란 중국의 Masewa사에서 제작한 커튼형식의 메쉬입니다. 꼬여진 그물망의 구조로 커튼레일에 쉽게 고정하여 파티션 용도로 많이 사용합니다. 주름의 양에 따라 설치 이미지가 많이 달라지므로 몇 배의 주름을 주느냐로 다양한 이미지 연출이 가능합니다. 소재는 알루미늄, 스테인레스, 스틸 3가지가 있으며 알루미늄 소재가 실내에 가장 많이 사용됩니다.

커튼메쉬의 높이는 최대 6m, 폭은 무한대로 제작 가능합니다. 재고 없이 발주 후 수입이 이루어지므로 납기일 1개월을 기본으로 준비하시면 적용이 용이할 것입니다.
Curtain, Partition wall, Ceiling, Column cover 등 다양한 부위에 적용 가능합니다.

간단한 시공으로
실내 인테리어에 다양한 연출이 가능합니다.

LECOEX Co., Ltd.

www.lecoex.com

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