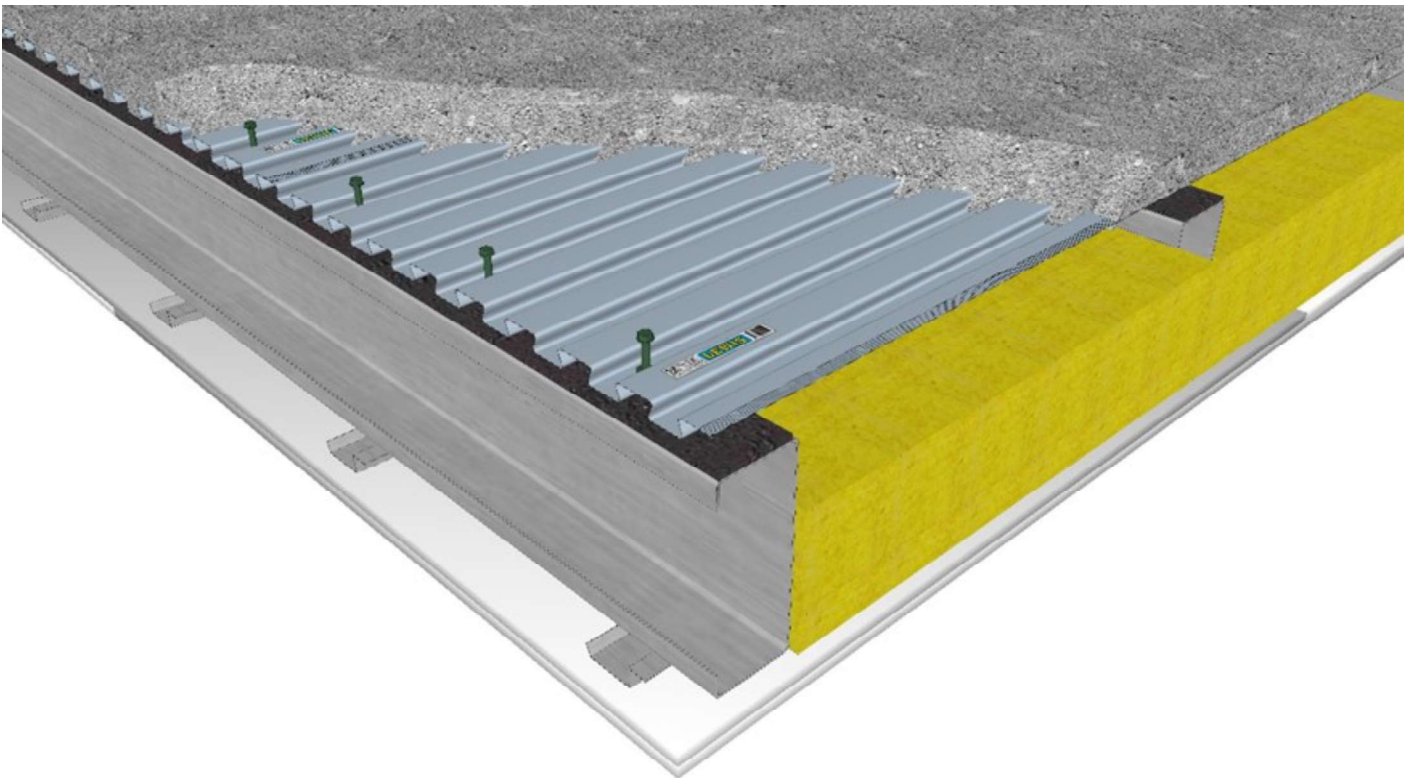


LEWIS[®]

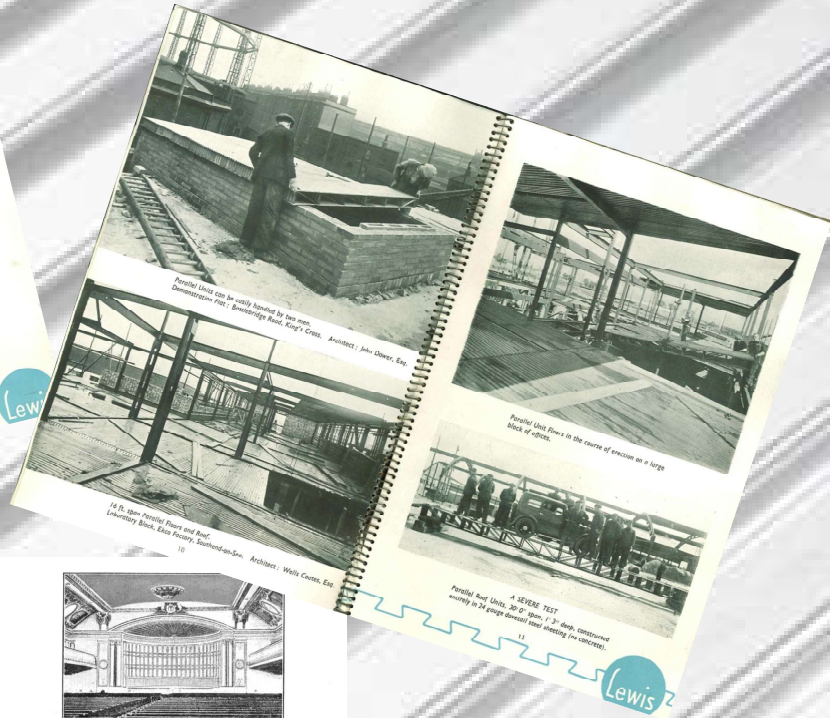
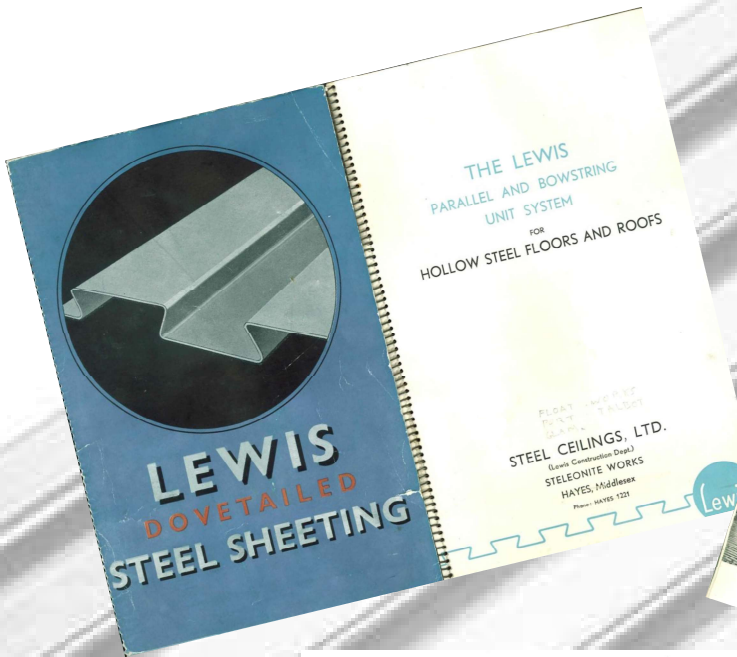
METAL DECK

FLOORING ROOFS FACADE



The specialist with a solution





DAKEN MET IJZEREN SPANTEN.
 Lewis Zwalwstaart Platen kunnen, gehaakt of met bouten aan de ijzeren spanten bevestigd op onderlinge afstanden van niet meer dan 1.80 Meter, op precies dezelfde manier gebruikt worden als zoeven beschreven is voor houten daken.
 Spanten, welke op meer dan 1.80 M. van elkaar staan moeten tusschenliggende spanribben hebben om de Lewis Zwalwstaart Platen te ondersteunen.

MANSARD DAKEN.
 Lewis Zwalwstaart Platen zijn een ideaal materiaal voor de constructie van de stiele schuifte van Mansard daken. Bij kleine daken, zoals die op bijgaande foto, kan het framewerk gemaakt worden van onze 3.2 c.M. gewalst staal kanaal en I-ijzer.
 Bij grotere daken worden de gebruikelijke constructieve ijzeren deelen aangewend met de Lewis Zwalwstaart Platen, bevestigd met bouten en haken.

ACHTERUITZETTINGEN IN GEBOUWEN.
 Het is dikwijls noodzakelijk voor licht en lucht in binnenplaatsen in een gebouw om de muren van de bovenverdiepingen achteruit te zetten en het hellende vlak, dat op die manier gevormd wordt kan gemakkelijk geconstrueerd worden met de Lewis Zwalwstaart Platen, welke met 5 of meer c.M. cement bedekt worden en afgewerkt worden met asphalt, leien of een andere dakbedekking.

Brandvrij tooneel met halfronde koepel erboven, 7 1/2 c.M. dik, geconstrueerd met Lewis Zwalwstaart Platen en I-ijzers.

GEBOGEN DAKEN.
 De buigbaarheid van de Lewis Zwalwstaart Platen, in dwarsrichting over de gleuven en vóór het cementeren, maakt deze buitengewoon geschikt voor het vormen van alle gebogen oppervlakken zonder eenige extra kosten. Veel kan bespaard worden in tijd, arbeid, versterking en kosten van de constructie door gebruik te maken van de Lewis Zwalwstaart Platen als een blijvende bekisting in elke gebogen bouw, zoals koepels, tongewelven en plafonds, oefgebogen in muzikanten, veranda's en luifels, kegelvormige torentjes, daken over uitbouwen van elken vorm enz.

Mansard dak. Lewis Zwalwstaart Platen vastgehouden tusschen ribben van 3.2 c.M. I-ijzer.

Een halfrond gevormd door een halfronde buitenkoepel en een schotelvormige binnenkoepel met een holte er tusschen. Met cement afgewerkt aan den buitenkant en afgepleisterd aan den binnenkant.

HISTORY

In 1930 REPPEL started the sale of the LEWIS[®] Dovetailed Sheeting in Europe and became a wholesaler in technical building materials.

In 2010, the first LEWIS project was carried out in the UAE. The LEWIS[®] Metal Deck was used as flooring for construction of modular building meant for workers accommodation (the Al Masaood project).

AL MASAOOD WORKERS RESIDENTIAL VILLAGE

HAMEEM WORKERS CITY, ABU DHABI

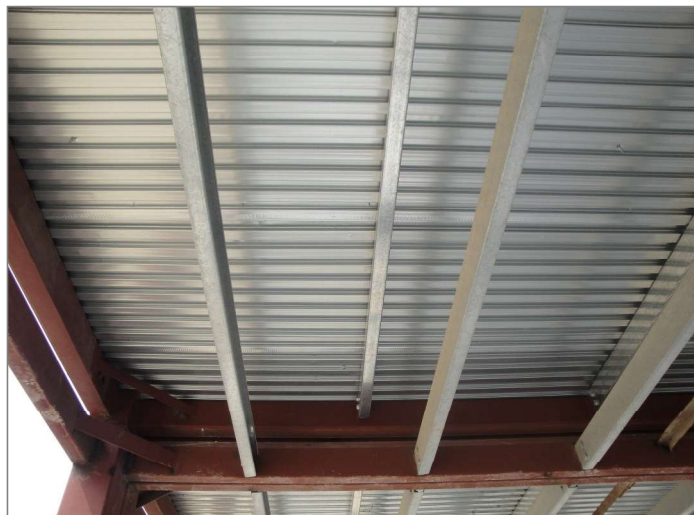
Modular building



LEWIS[®] DECK ON LGS JOISTS

ERECTED IN FACTORY ABU DHABI

CONCRETE ON SITE

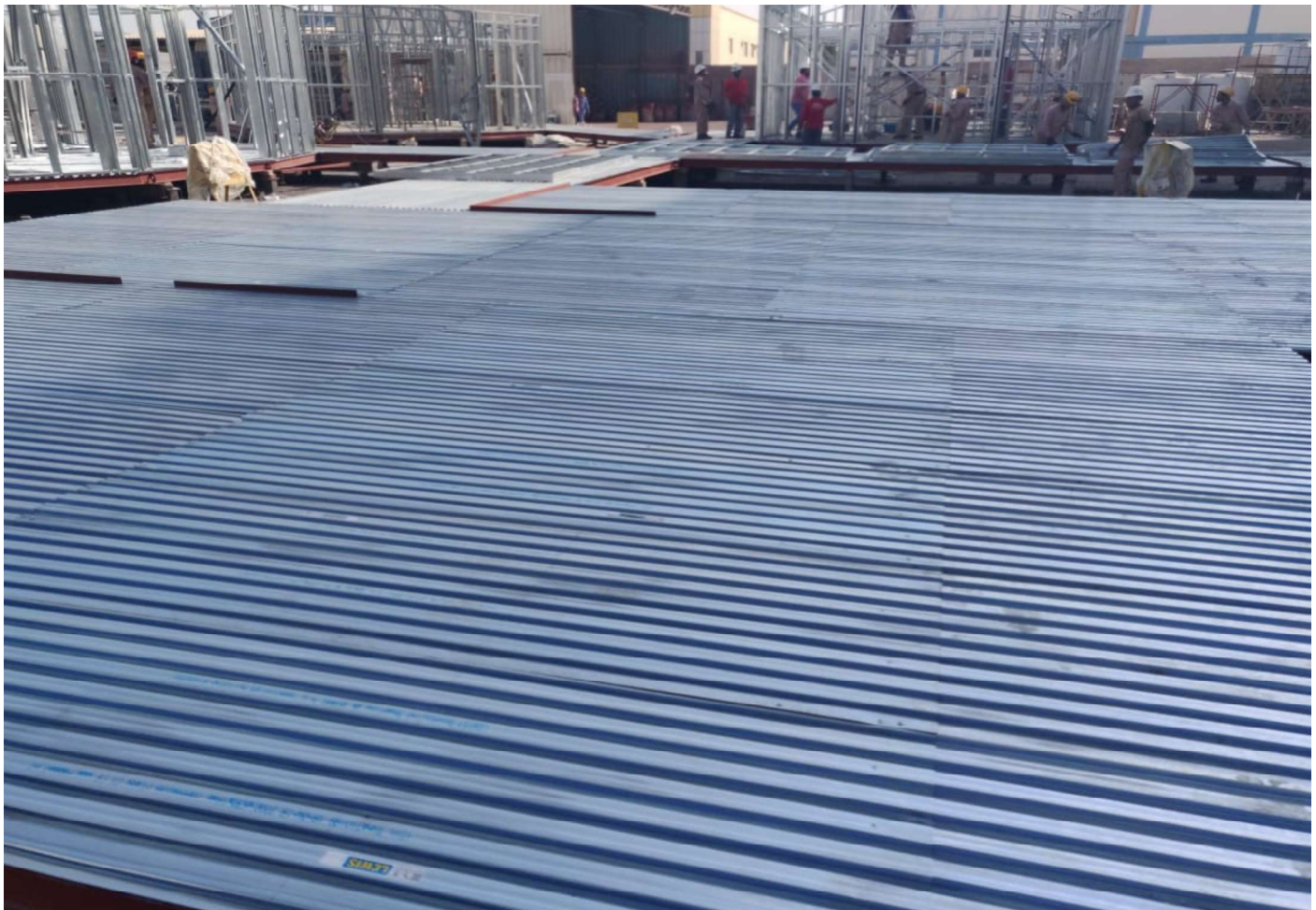
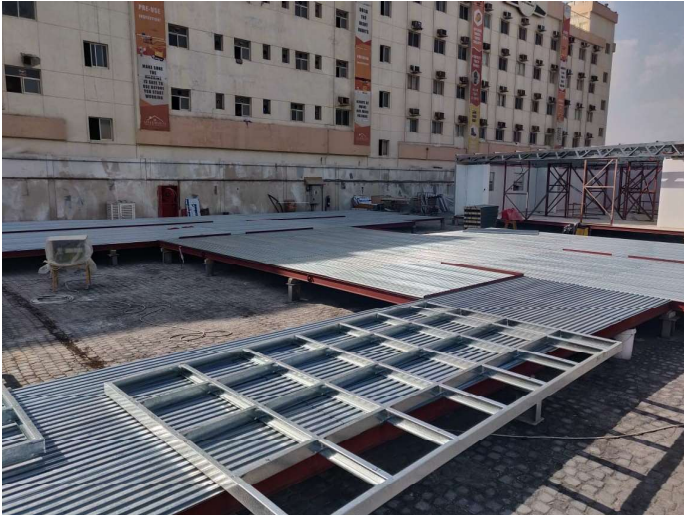


SUMMER CAMP FOR ROYAL COMMISSION

AL WAJH & YANBU (KSA)

LIGHT STEEL FRAMING

FABRICATED AND ERECTED IN
AJMAN, UAE

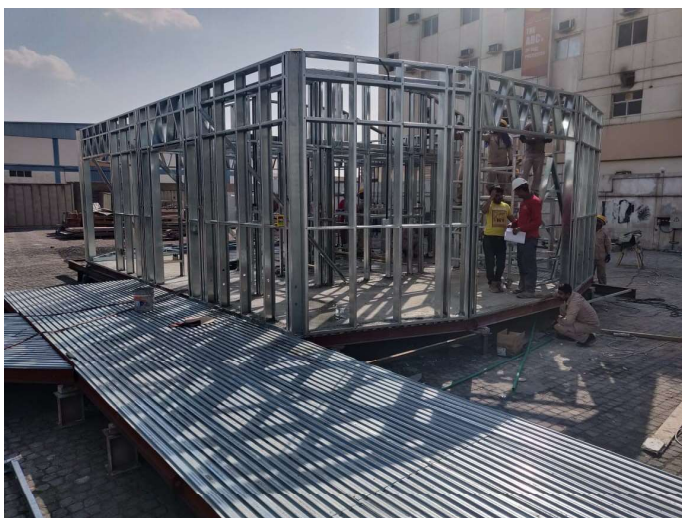


LIGHT STEEL FRAMING

SUMMER CAMP FOR ROYAL COMMISSION

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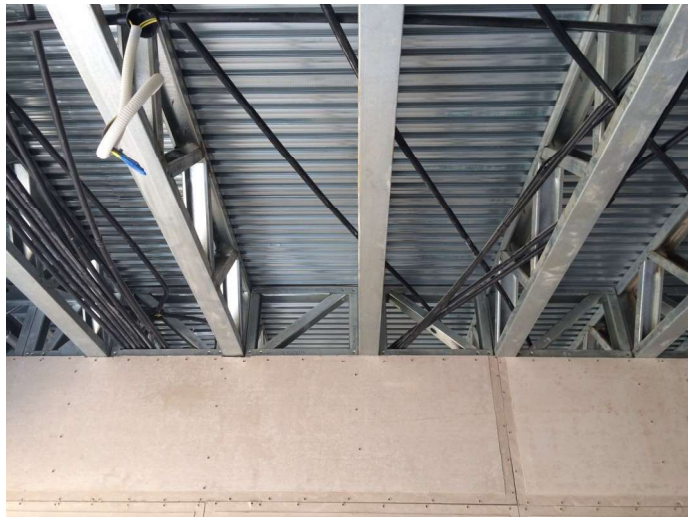


AL WASL FITNESSCLUB, DUBAI

LIGHT STEEL FRAMING



HYBRID STRUCTURE (HOT ROLLED AND COLD FORMED STEEL WITH LEWIS[®] FLOORING)

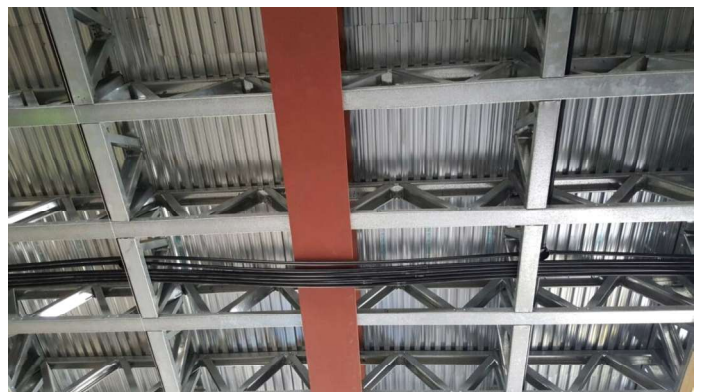
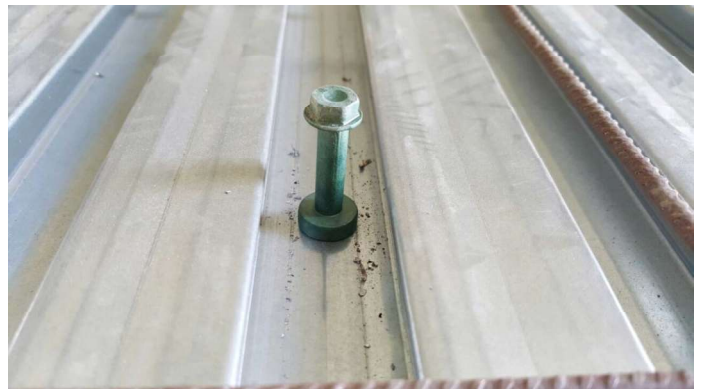


FACTORY RAS AL-KHAIMAH

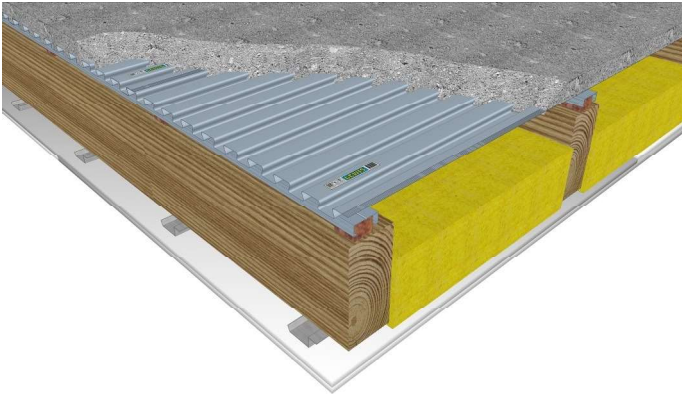
LIGHT STEEL FRAMING



HYBRID STRUCTURE (HOT ROLLED AND COLD FORMED STEEL WITH LEWIS[®] FLOORING)



Q-DECK

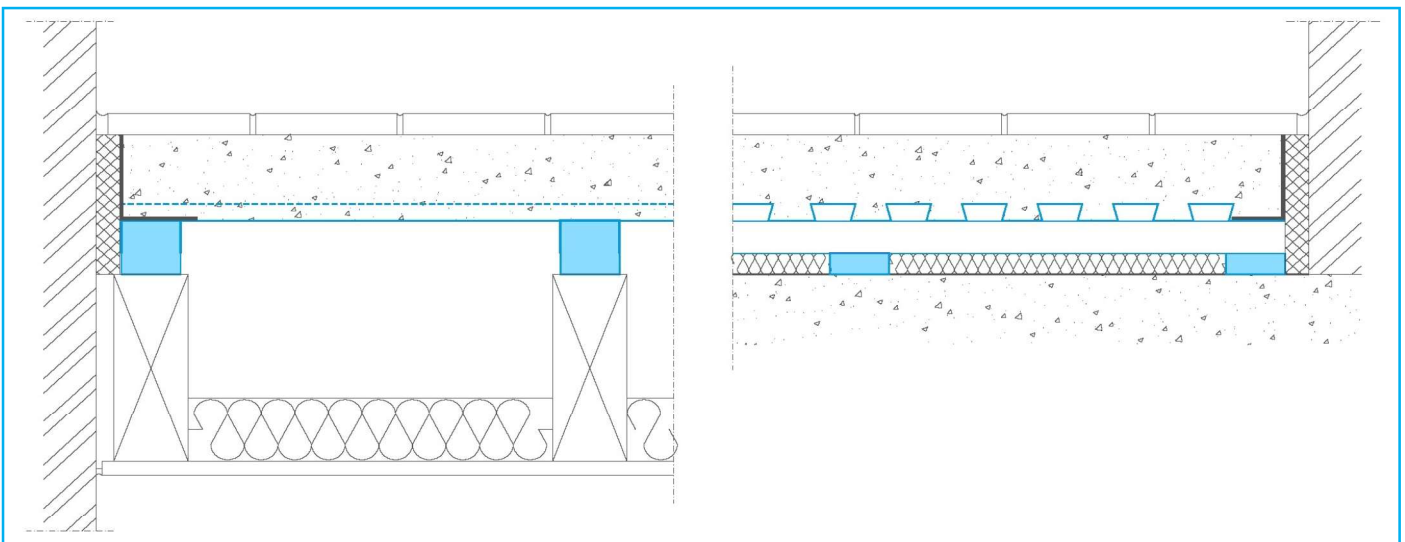


CDM-QDECK is a high performance acoustic floating floor deck system. The system has a high bending stiffness for limited built-up height and therefore is well suited for transit areas inside buildings like parking, supermarket and warehouse application types.

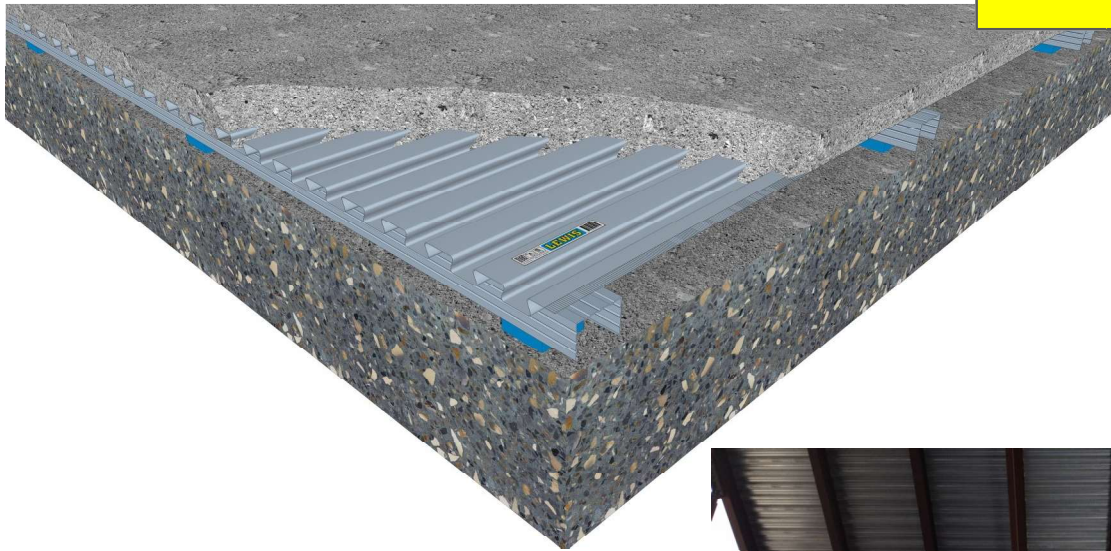


SYSTEM FEATURES

- ◆ High performance floating floor system for concrete and light wooden construction (joist floor) with large support spans
- ◆ Available in two standard grades, depending on the performance request: CDM-QDECK-30 and CDM-QDECK-50
- ◆ CDM-QDECK performances: R_w up to 75dB (STC up to 75dB), L_{nw} as low as 35dB (IIC up to 75dB) and ΔL_{nw} up to 45dB (Δ IIC up to 45dB)
- ◆ Can be changed to meet the project specifications in terms of natural frequency and damping requirements, L_{nw} (IIC) or R_w (STC)
- ◆ High bending stiffness specifically for both restricted build-up height and limited extra weight applications
- ◆ Extremely quick to install resulting in a cost effective solution
- ◆ Sustainable and a wide list of applications with proven performance

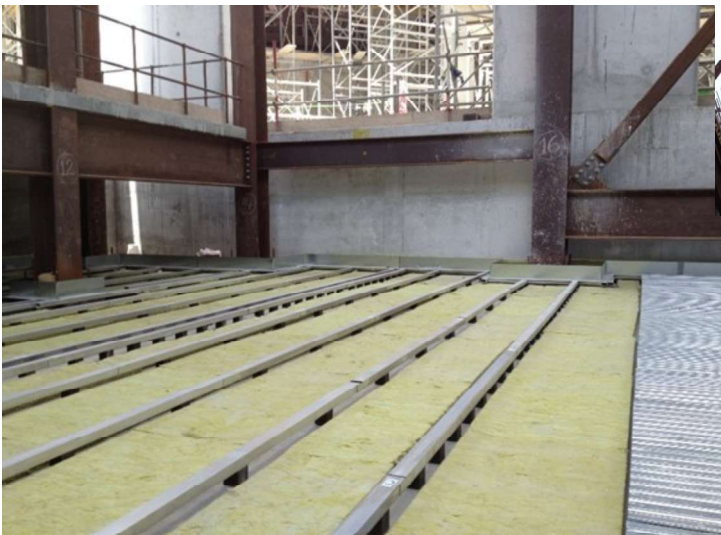
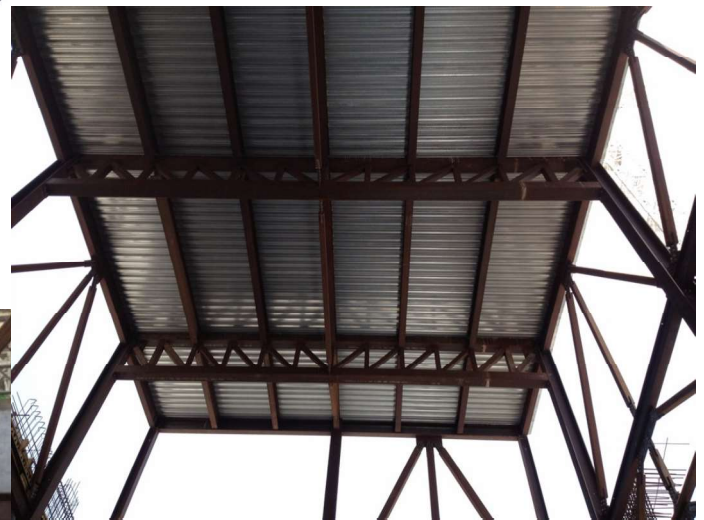


Q-DECK



AUDITORIUM NEW YORK UNIVERSITY

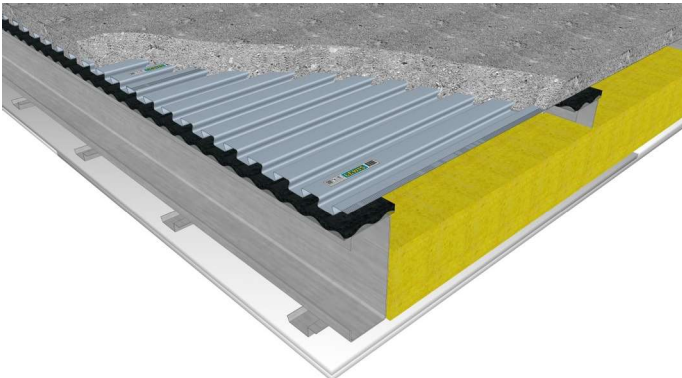
ABU DHABI



ACOUSTICAL FLOOR SYSTEM
FOR EXISTING CONCRETE FLOOR
(RAISED FLOOR / FLOATING FLOOR)

ACOUSTIC

Estimated field data based on UK requirements

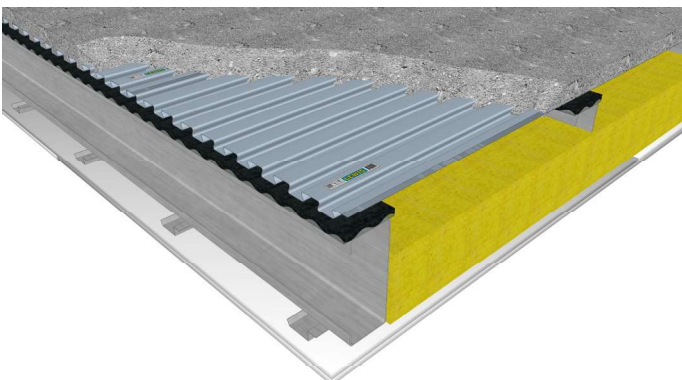


Airborne sound: $D_{nT,w} + C_{tr} = 57$

Impact sound : $I_{nT,w} = 52$

FLOOR BUILD-UP:

- Fine grade concrete
- LEWIS® Metal deck
- CDM-MTA-15/7 strips
- Steelframe C-channels—ctc 600mm
- Mineral wool
- Spring stirrups
- Gypsum board

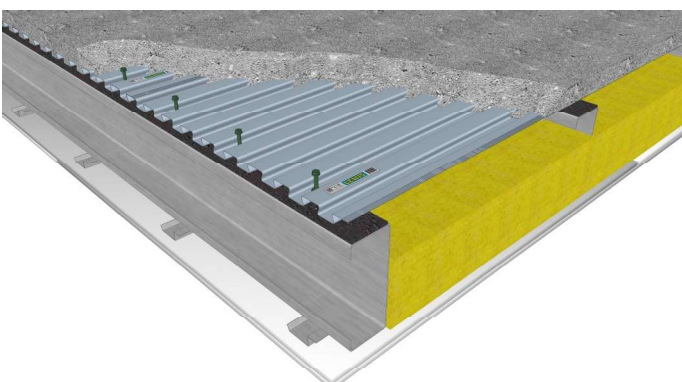


Airborne sound: $D_{nT,w} + C_{tr} = 57$

Impact sound : $I_{nT,w} = 58$

FLOOR BUILD-UP:

- Fine grade concrete
- LEWIS® Metal deck
- CDM-MTA-5 strips
- Steelframe C-channels—ctc 600mm
- Mineral wool
- Spring stirrups
- Gypsum board



Airborne sound: $D_{nT,w} + C_{tr} = 57$

Impact sound : $I_{nT,w} = 69$

FLOOR BUILD-UP:

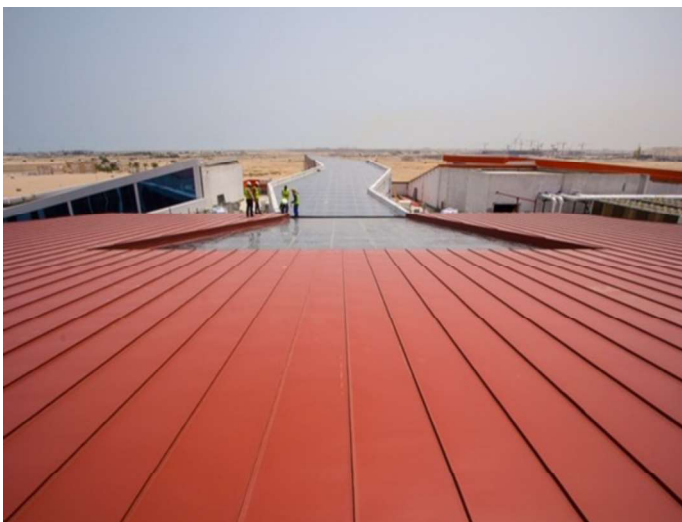
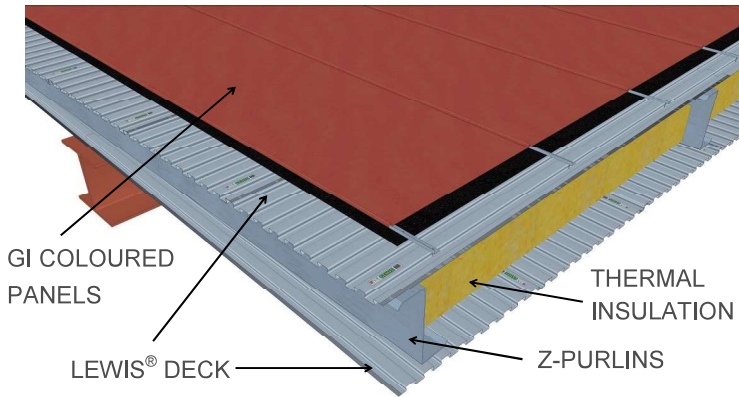
- Fine grade concrete
- LEWIS® Metal deck
- CDM-MTA-5 strips
- Deck screw fixed to channels (60 connections)
- Steelframe C-channels—ctc 600mm
- Mineral wool
- Spring stirrups
- Gypsum board

ROOF BUILD UP

**AMERICAN ACADEMY SCHOOL
DOHA QATAR**

LEWIS[®] DRY ROOF CASSETTE

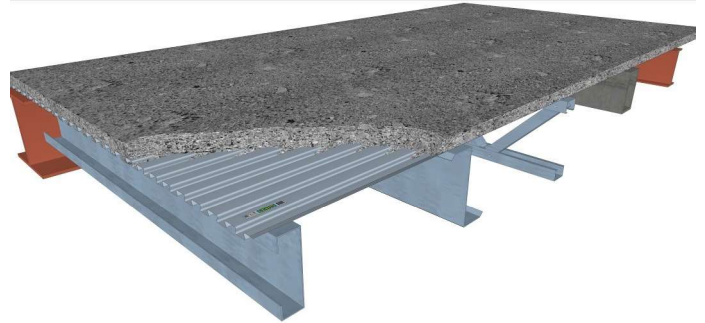
WITH ESTIMATED WEIGHT 15 kg/m²



THE PRODUCT

LEWIS[®] dovetailed metal decking is a self-supporting, light gauge galvanised steel reinforcement sheet, used for shuttering and reinforcing lightweight concrete or screeded floors of limited thickness (50 mm).

Used in a composite floor construction LEWIS[®] dovetailed metal decking provides a first class solution for fire protection, acoustic issues and under floor heating and cooling within floors.



LEWIS[®] metal decking solutions can be used in a varied range of projects from renovation and conversions to traditional new build, timber frame, off-site system building, modular building systems and mezzanine floors.

LEWIS[®] metal decking is produced in our own ISO 9001 certified production facility.

The LEWIS[®] metal decking as well as the floor system have been extensively tested meeting the requirements renowned international building institutes.



FEATURES

- ▶ Less dead load (from approx. 0.9 kN/m²)
- ▶ Thin Floor thickness (from 50 mm)
- ▶ High permissible load
- ▶ Spans (centre to centre) up to 2500 mm
- ▶ High impact and airborne sound insulation
- ▶ Fire resistance up to 120 minutes

BENEFITS

- ▶ Flexible system construction
- ▶ Manufactured from high quality steel
- ▶ Sustainable and cost reducing solution
- ▶ Easy to install

TECHNICAL DETAILS

Nominal width	: 630 mm
Effective width	: 580 mm
Standard length	: 2200 mm
Length range	: 800—7000 mm
Steel gauge	: 0.5 mm (0.4, 0.6, 0.7 mm available)
Height of profile	: 16 mm
Flange width	: 38/34 mm
Weight	: 0.058 kN/m ²

Dimensional Tolerances:

length	: 1-4 mm
width	: 1-3 mm

Moment of inertia : $I_x = 3.6 \text{ cm}^4/\text{m}^1$

length	: 1-4 mm
width	: 1-3 mm

Moment of resistance : $W_x = 3.0 \text{ cm}^3/\text{m}^1$

length	: 1-4 mm
width	: 1-3 mm

STEEL QUALITY

S320GD + Z275/Z100 N-A-C according to NEN-EN10147.

Other qualities available upon request.

TESTREPORTS

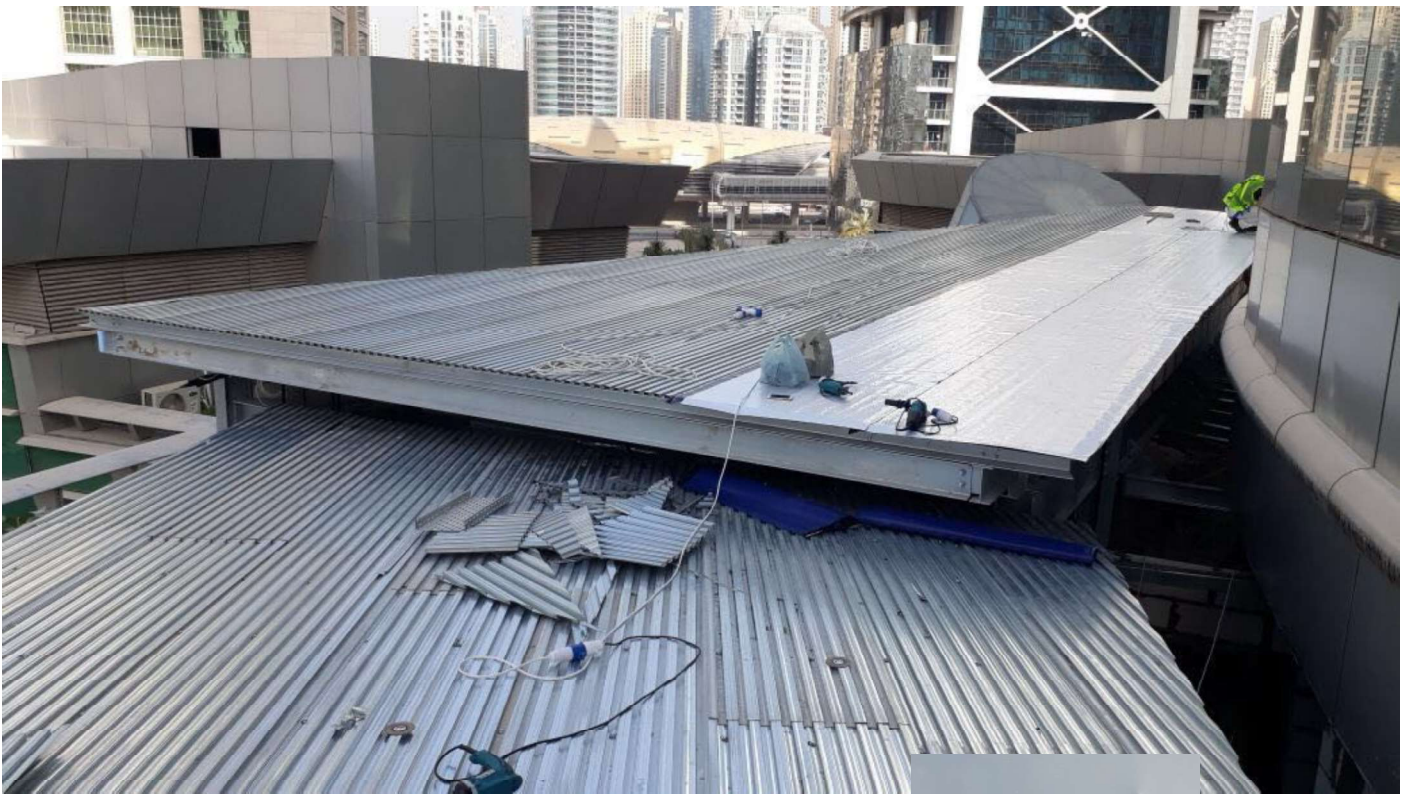
BRE
HAGEMAN
EFECTIS



ROOFING

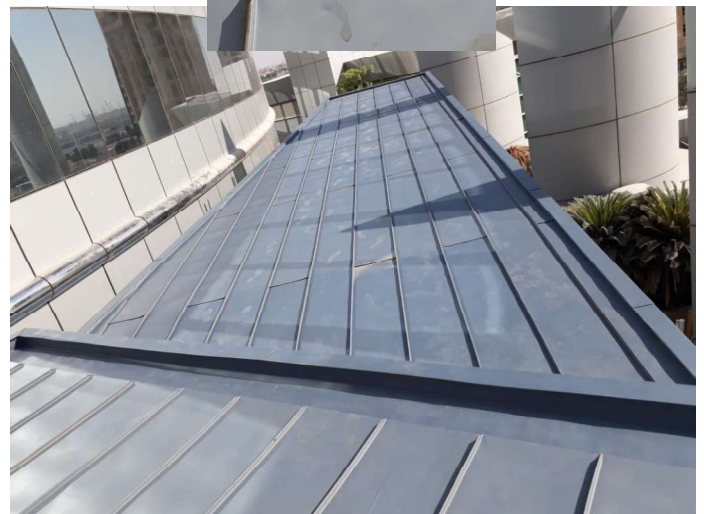
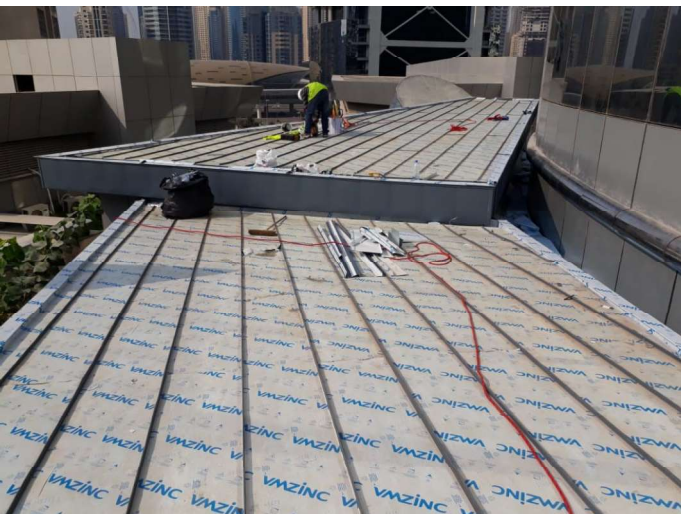
AI MAS TOWER (JLT) / DIAMOND TOWER

DUBAI



ZINC ROOF WITH LEWIS[®] DECK

ARCHITECTURAL APPLICATION OF LEWIS[®] DECK
WITH PURLINS AND INSULATION UNDERNEATH

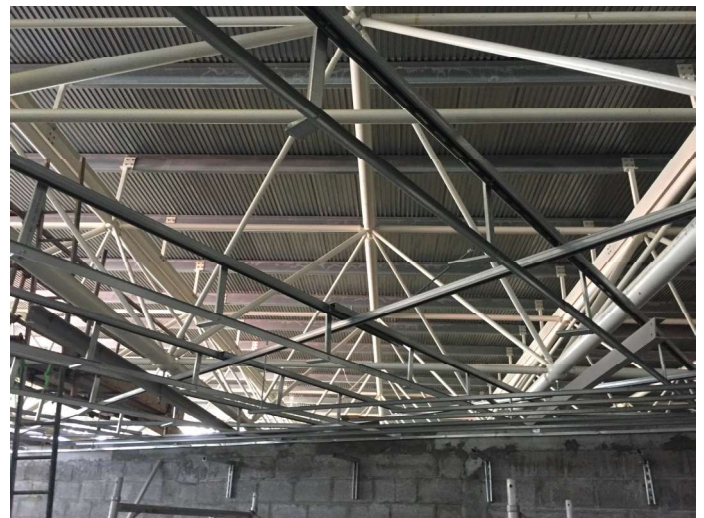


VOX CINEMA, DEIRA CITY CENTER

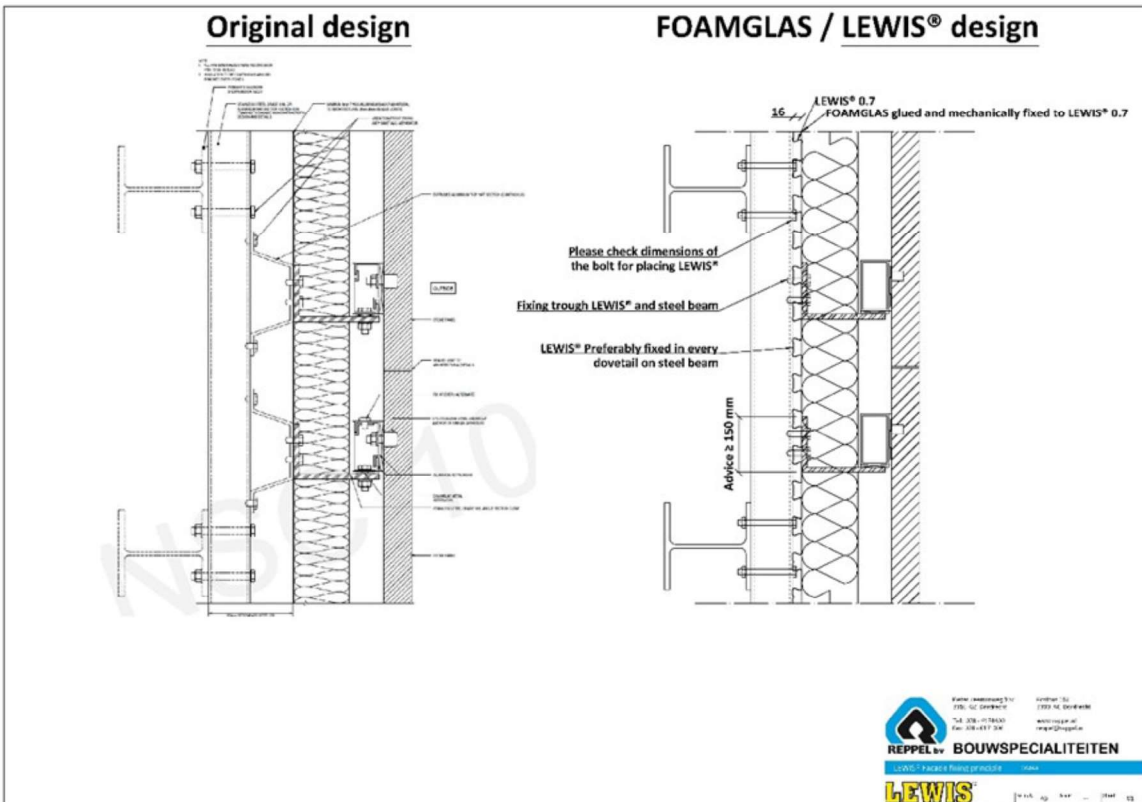
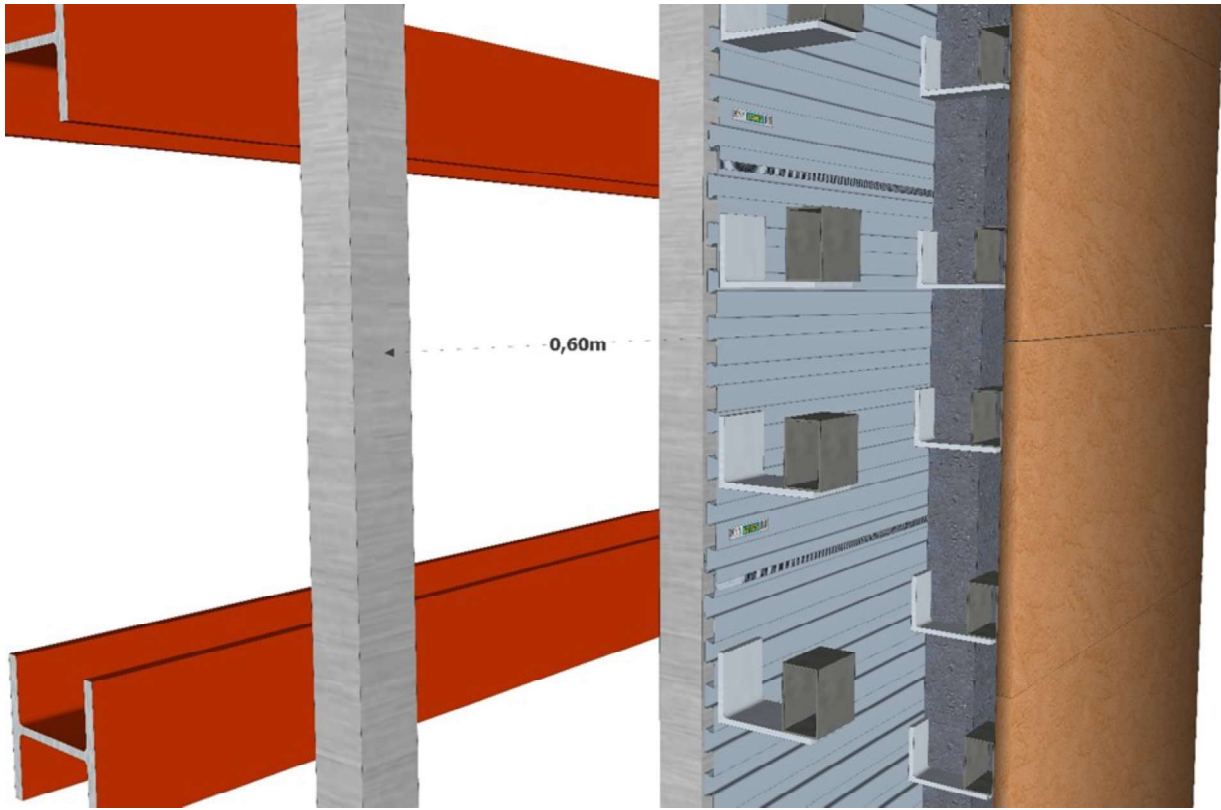
DUBAI

ROOFING

LEWIS[®] 0.5mm +
VAPOUR BARRIER +
PIR BOARDS MECHANICAL FIXED +
GLUED ROOF MEMBRANE



FACADE



AI MUTAIRI VILLA, UMM AL SHEIF

JUMEIRAH, DUBAI

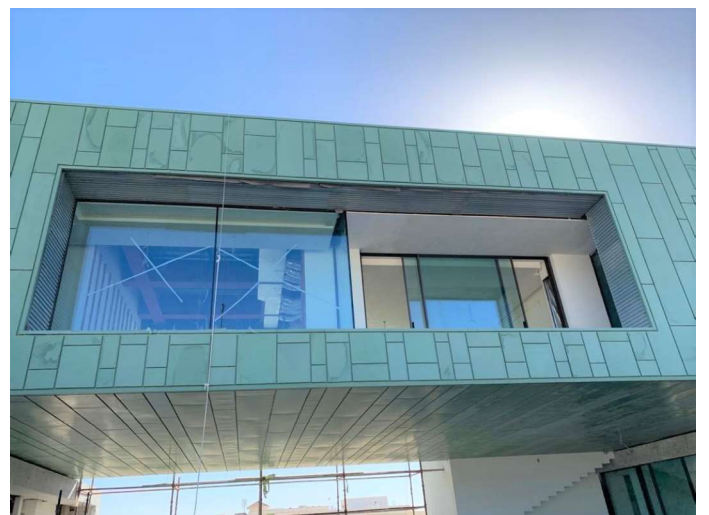
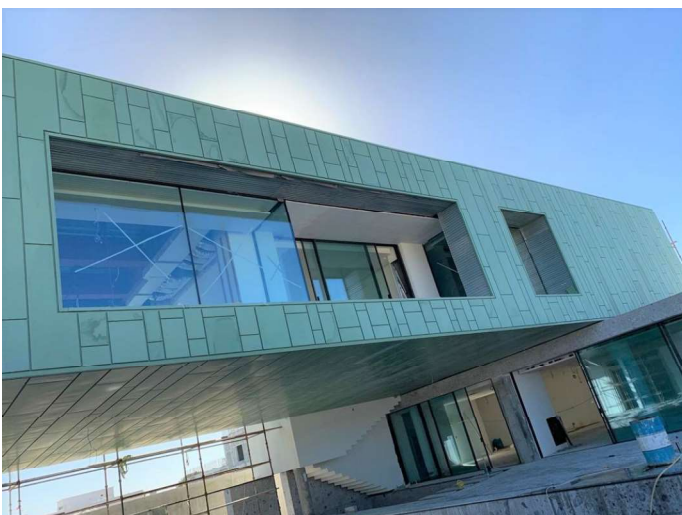
FACADE



COPPER CLADDING

LEWIS® 0.7mm

NON COMBUSTIBLE / TERMITE
RESISTANT FIXING SYSTEM,
FOR ZINC / COPPER / STAINLESS
STEEL PANELS



FACADE

SA'ADIYAAT BEACH CLUB, ABU DHABI

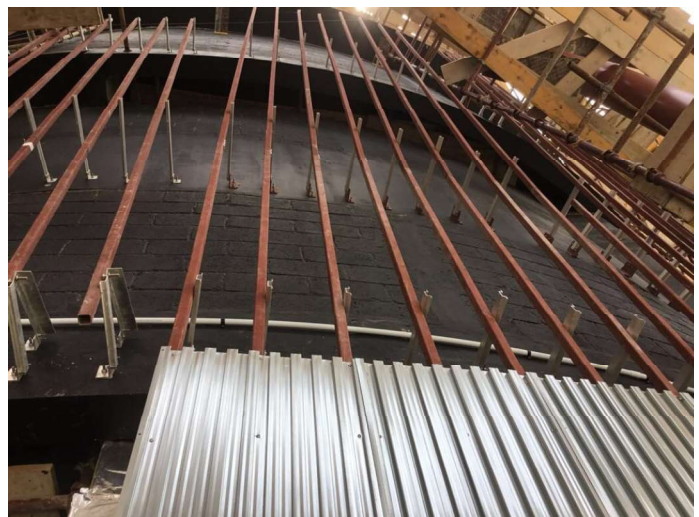
LEWIS[®] 0.7mm

WITH VM ZINC PANELS



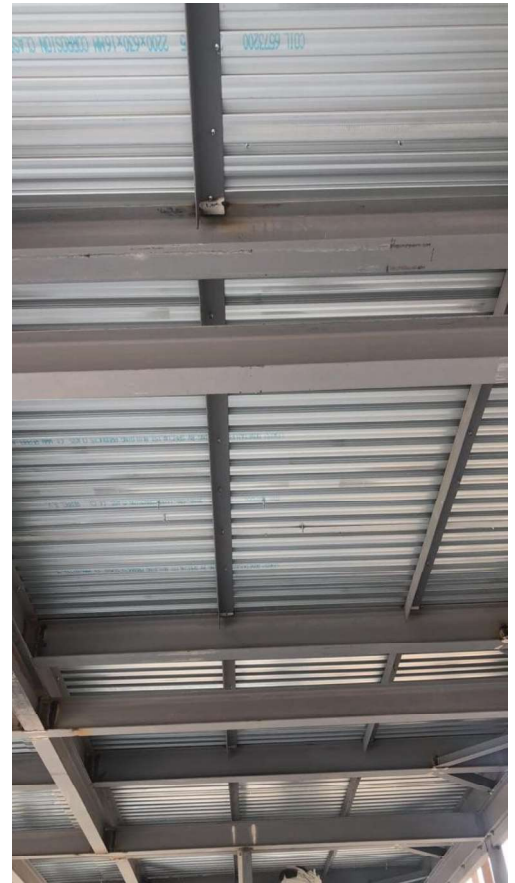
BENEFITS IN FACADE FIXING WITH LEWIS[®]

- ▶ Dead loads - zinc cladding (10 kg/m²)
- ▶ Wind loads - 140/150 km/h
- ▶ Fire rating -
- ▶ Ease of installation
- ▶ Ease of fixing
- ▶ High contact area

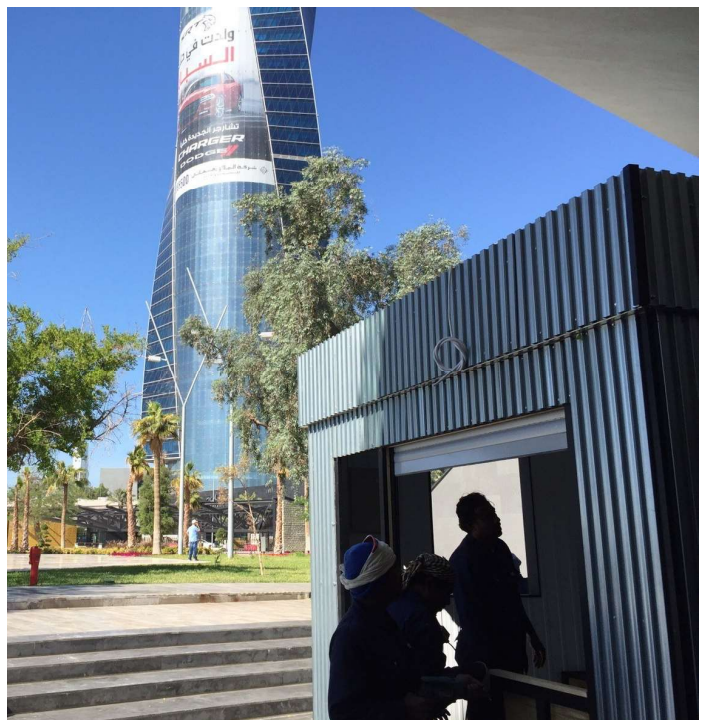


PREFAB PROJECTS KUWAIT

PREFAB

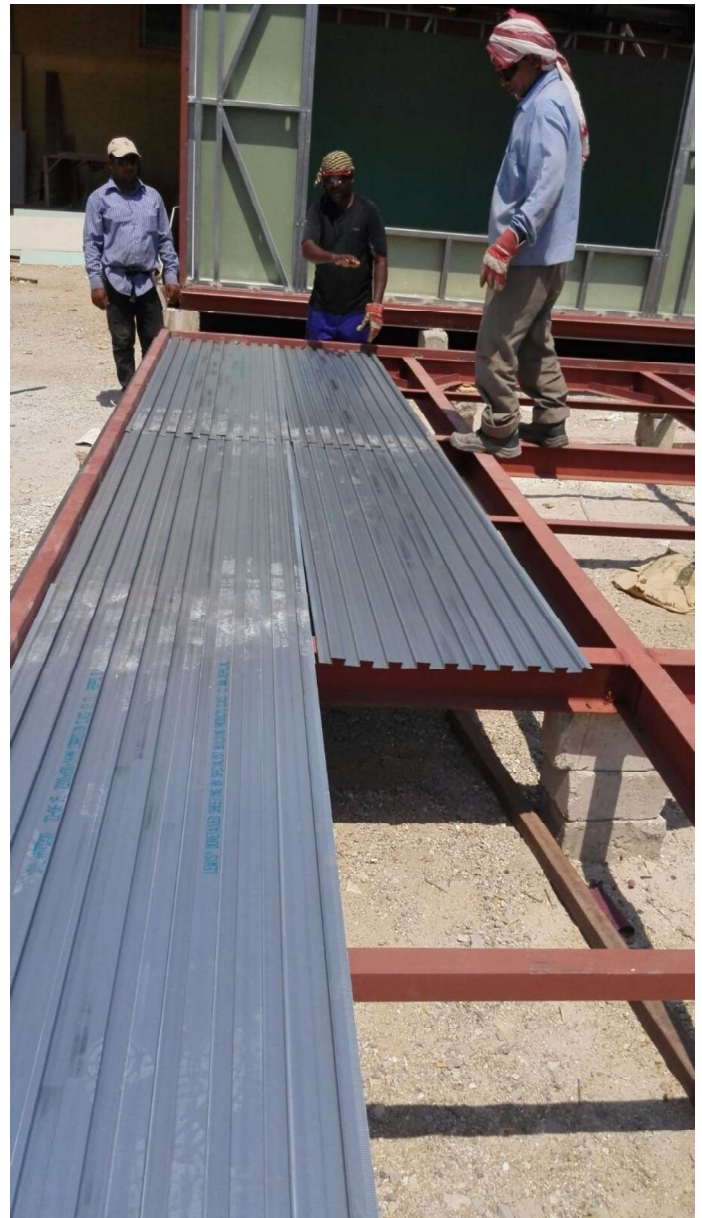


HOT ROLLED STEELS



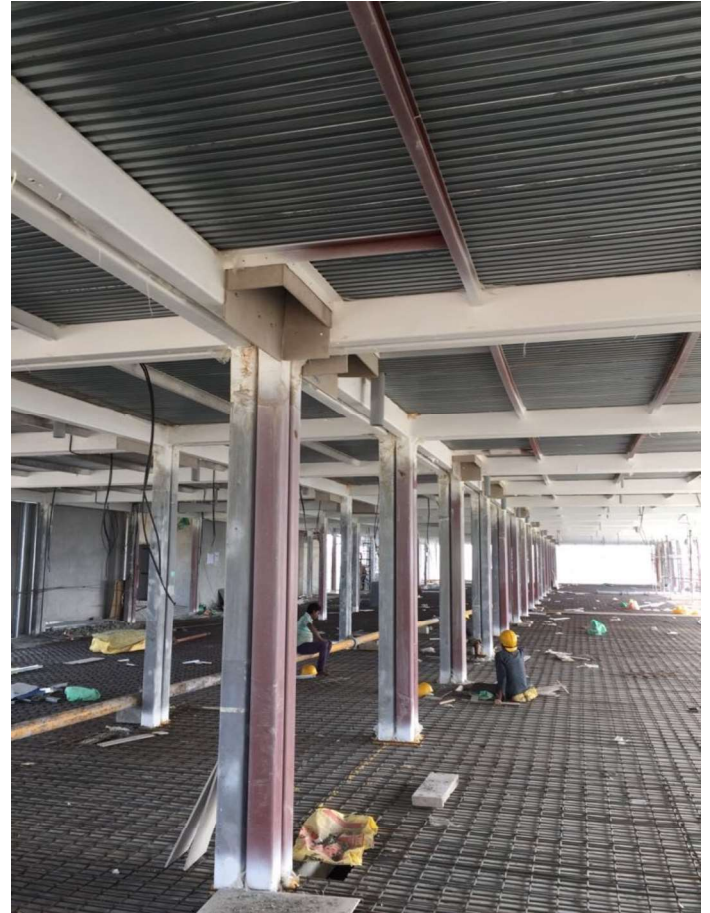
PREFAB PROJECTS KUWAIT

PREFAB



AVITIS INDIA

PREFAB



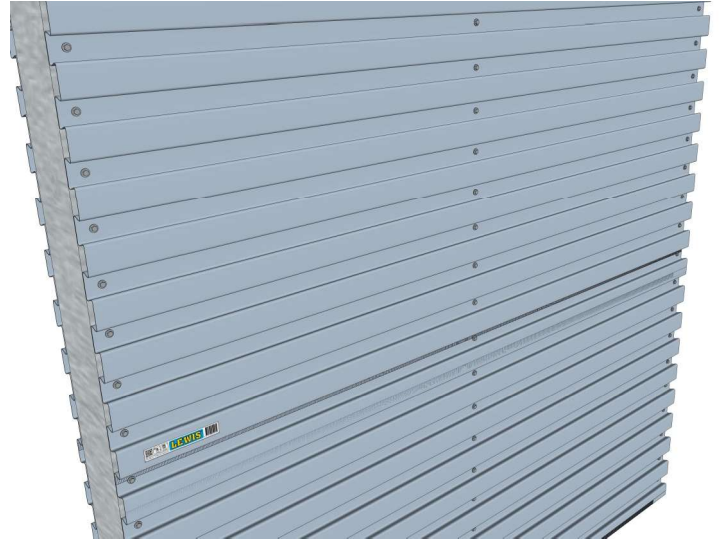
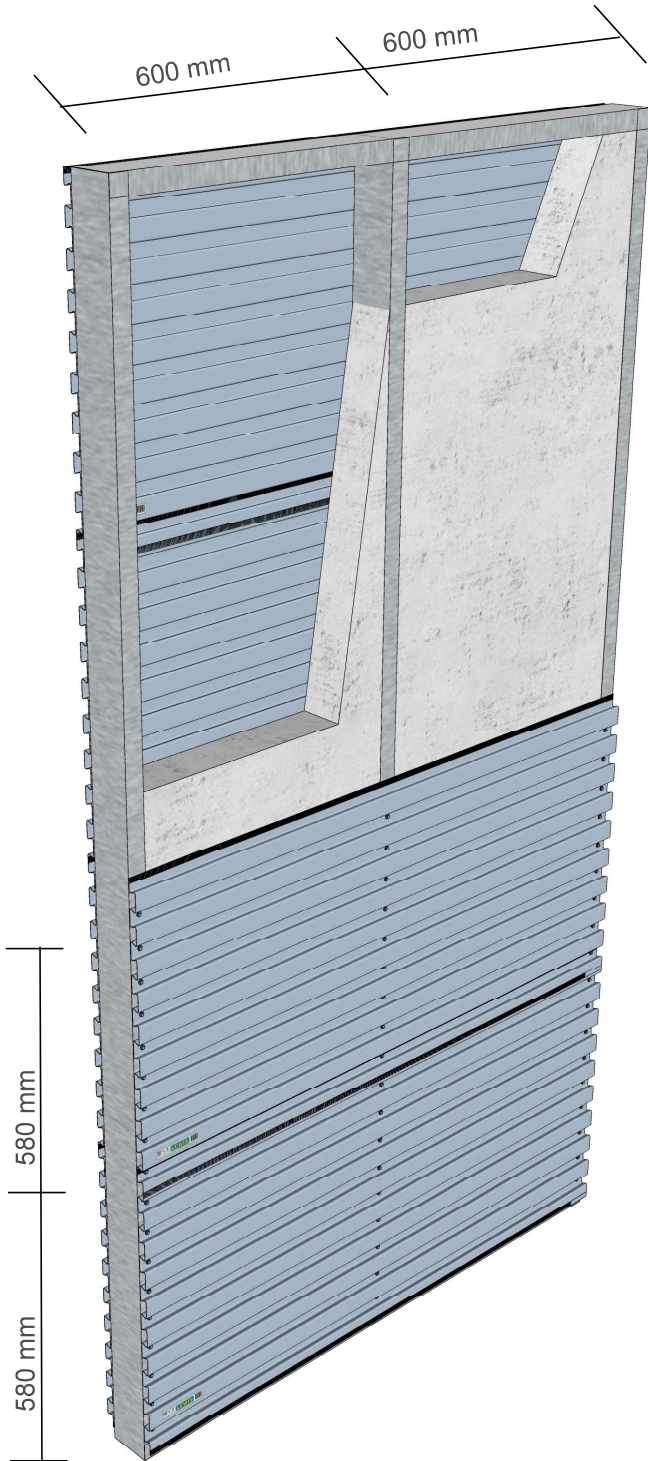
KEY BENEFITS

- ▶ Less dead load 90 kg/m²
- ▶ Saving in steel (longer spans 1200 mm)
- ▶ High loads
(uniformly distributed (10 kN/m²) and
concentrated (6.5 kN/m²))
- ▶ Modular



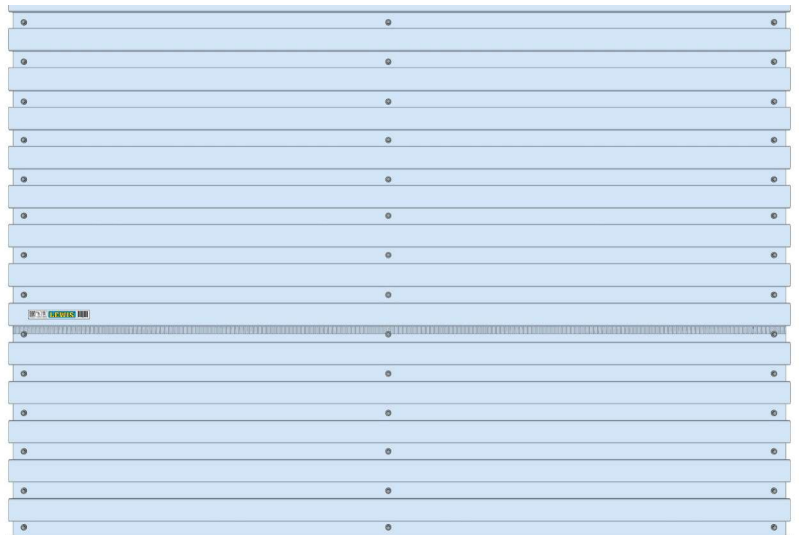
LEWIS[®] PARTITION WALL SYSTEM

WALLS



TEKS FIXING IN EVERY LEWIS[®]
DOVETAIL INTO THE C-PROFILE

HIGH ACOUSTICAL AND FIRE
PERFORMANCE WITH LIGHT
WEIGHT CONCRETE





LEWIS[®]