

Walk on Ceiling System

Workspace redefined





Walk on Ceiling System

Compromise isn't an option when it comes to our walk-on-ceilings

Norwood design and manufacture precision walk on ceilings for cleanrooms and high specification manufacturing facilities. Walk-on ceiling panels were developed for facilities requiring full accessibility in the plenum or interstitial space. Load-bearing capabilities can be engineered for punctual loads.

Norwood's ceiling panels provide architects, engineers and interior planners with tremendous flexibility in design and conceptualization, with off-site construction minimising disruptions on site whilst guaranteeing a high quality finish to consistent tolerances. Apertures for HEPA filters, light fixtures, control devices, and other penetrations are engineered and cut in the factory, enabling the end user a large degree of future flexibility as all components are relocatable, All products are manufactured from high grade galvanised steel with an antibacterial vinyl applied to the face. Ceilings are available with integrated walk on glazing lights, offering a load capacity up to 250kg/m2.







We turn shell constructions into key-ready buildings (Photo left: Cleanrooms, Qatar; middle: Cell Therapy Laboratory, Qatar; right: TB Laboratory, Qatar)

Walk on ceiling system

Construction

WALK ON CEILING SYSTEM

Tracks:

steel sections, 1.2 mm thick.

Plank span: Up to 3000mm

Plank width:

Up to 1200mm, with makeup planks to suit project layout

Plank thickness: 57mm

Steel frame:

Galvanized steel aperture and channels

Ceiling facia:

Standard facia trims or according to project specification

Internal filler: Egg crate board.

Ceiling aperture: 1.2mm zintech channel

Joint detail: Silicone sealant.

Plank strength: Classification – Heavy Duty

Plank loadings: Safe working limit of 250kg, (0.61kN/m2) refer to test report 189792

Finish

Planks: 0.75mm thick skin with a durable pre-coat vinyl finish

Colour

Range of plain colors, steel finishes, timber finishes, fabric finishes & stone finishes are available for selection

Geometrical features

DIMENSIONS

Length: Span up to 3000 mm. Width: Up to 1200mm with makeup planks to suit project layout

CEILING APERTURES

These can be factory prepared, lined and reinforced with 1.2mm zintech channels for the site fitting of light units, fan filters, sprinklers etc

CEILING SYSTEM

Aperture safety covers:

Purpose designed 'safety boxes' can be supplied to sit on top of any aperture preventing any potential risk of falling through

Ceiling Aperture:

These can be factory prepared, lined & reinforced with 1.2mm zintec channels for the site fitting of light units, fan filter & sprinklers etc.

Plank Support:

Planks are designed to sit on and span from partition wall to partition wall. Should spans be greater than 4000mm support systems can be supplied with the option of concealed angle brackets at the panel joints or a ceiling support 'T' section with planks resting on the 'T' flange. In both cases M10 threaded rod carries the support vertically locating onto a designating point.

Plank Abutment:

Interlocking panels with as friction fit dimple biscuit channel manufactured from 1.2mm zintec forming a single line connection between panel to panel

Use

This ceiling system helps to move freely on top of the ceilings for service and maintenance works

Acoustics

WEIGHTED AIRBORNE SOUND REDUCTION INDEX

Standard & higher acoustics are available depending upon the type of Norwood partition walls and doors, enhancement can be made to increase the sound reduction index, guidance can be given on request.

Fire

Class 0 spread of flame: BS 476-7 to class 0

In accordance with BS Test standards.

Load

Plank Loadings: Safe working limit of 250kg, (0.61kN/m2) refer to test report 189792

In accordance with BS 6399

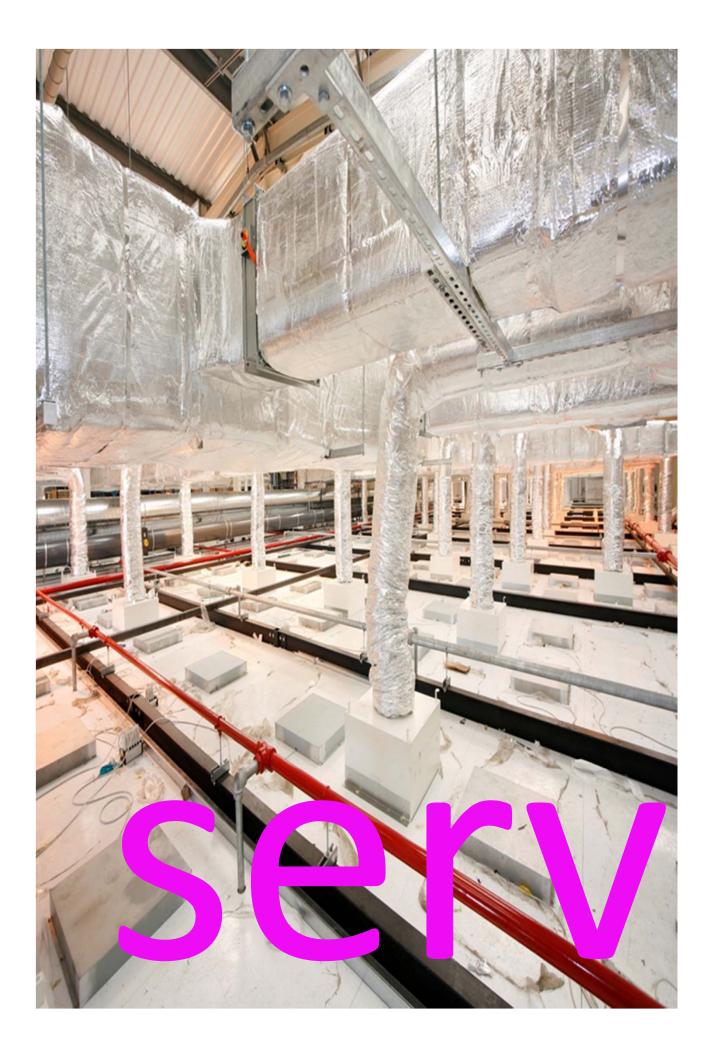
TRUSS I VALUE

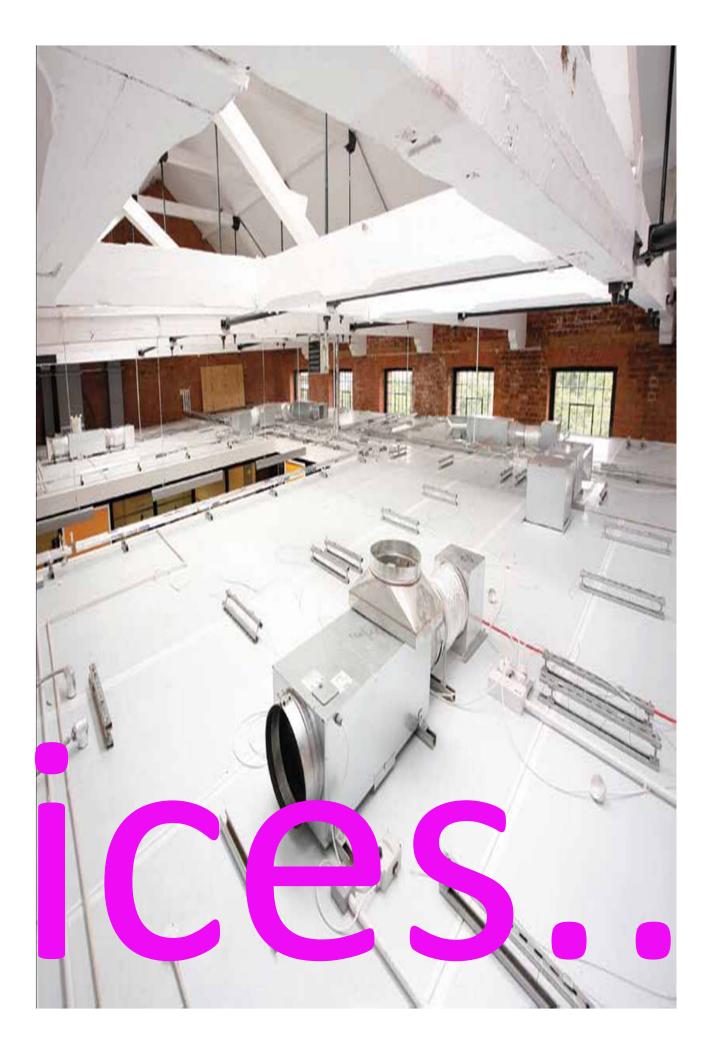
Compressive resistance Pc, Truss = $Q \times Atop \times pc = 119.3kN$

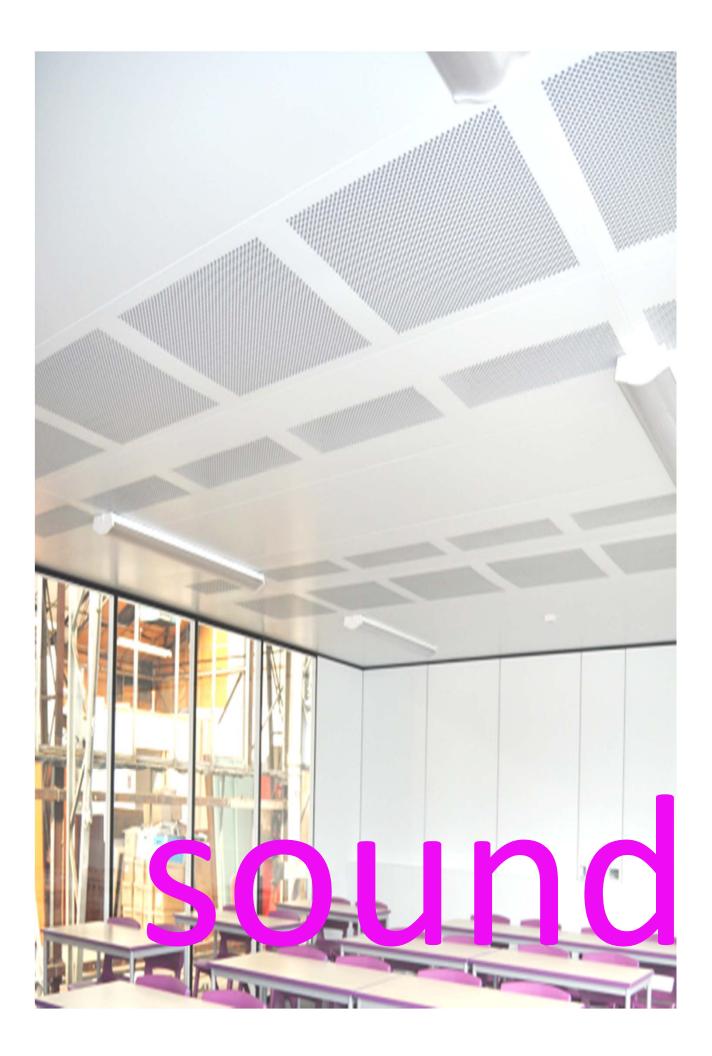
Tensile resistance PT, truss = $Q \times (A \text{ top} + A \text{ angle}) \times py = 298.2 \text{ kN}$

Bending Check - PASS

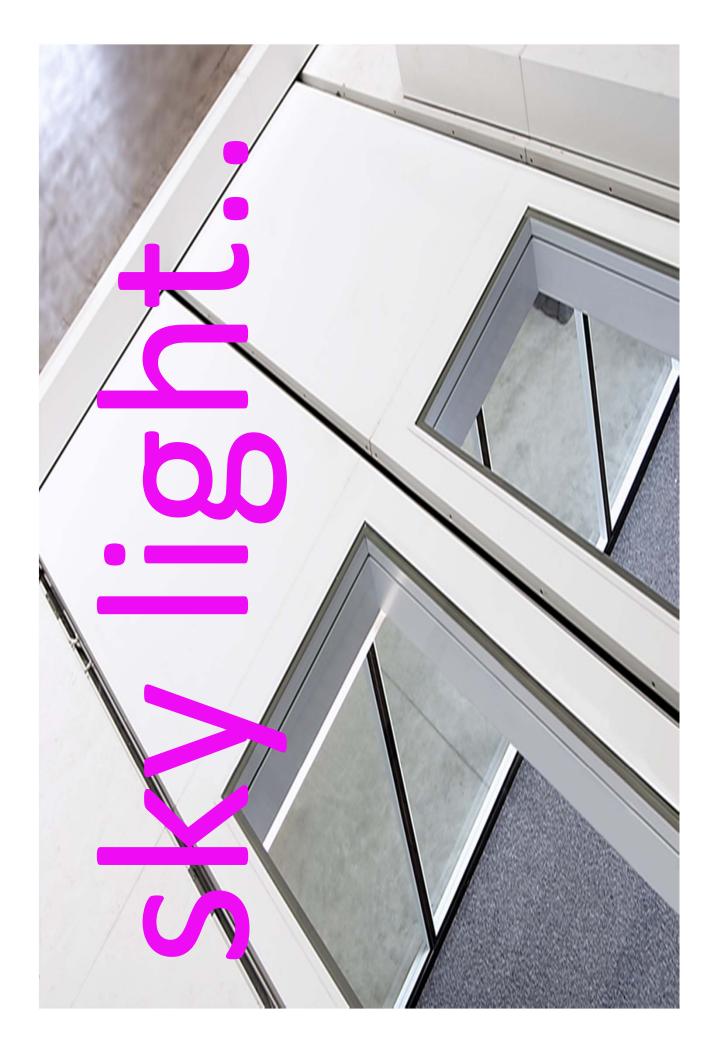
Shear Check - PASS







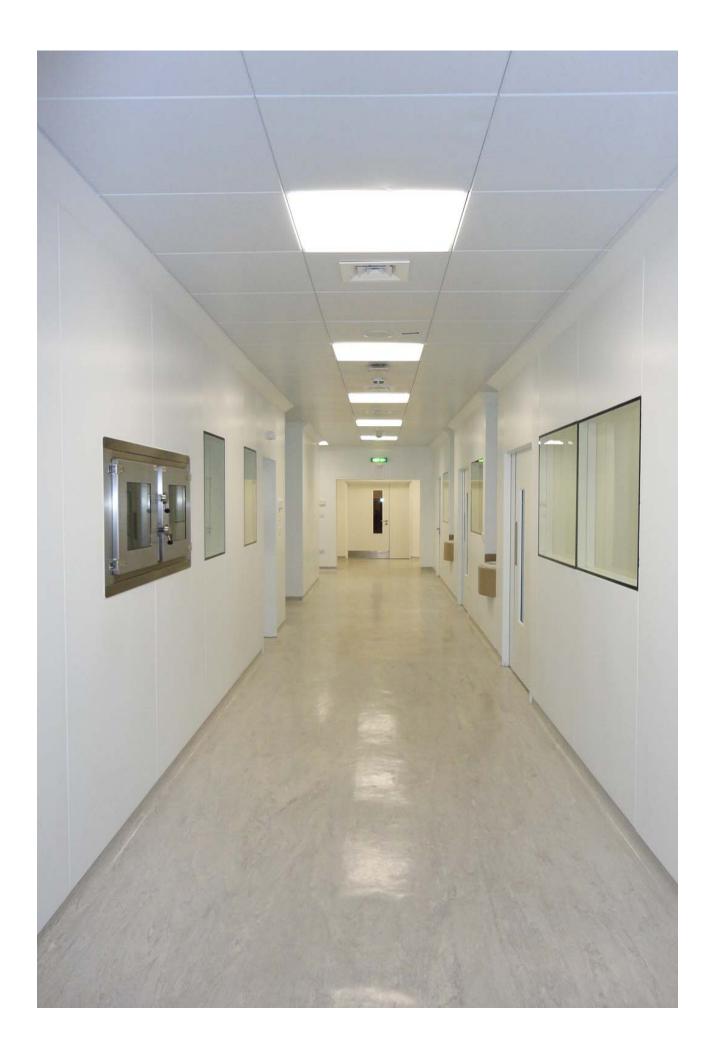


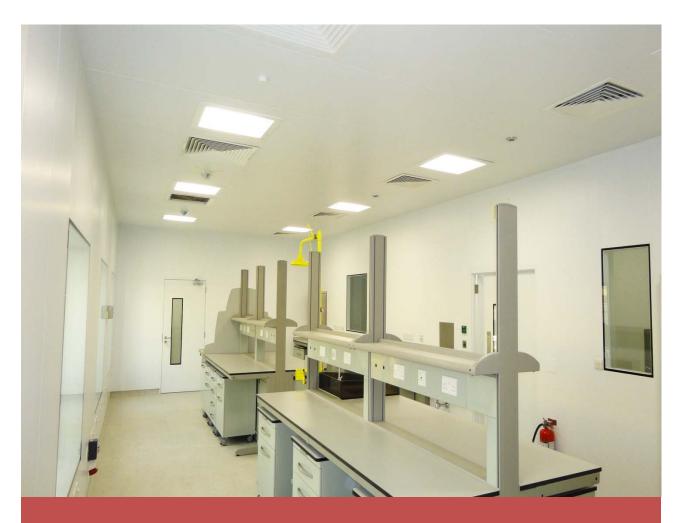




Cell Therapy Laboratory







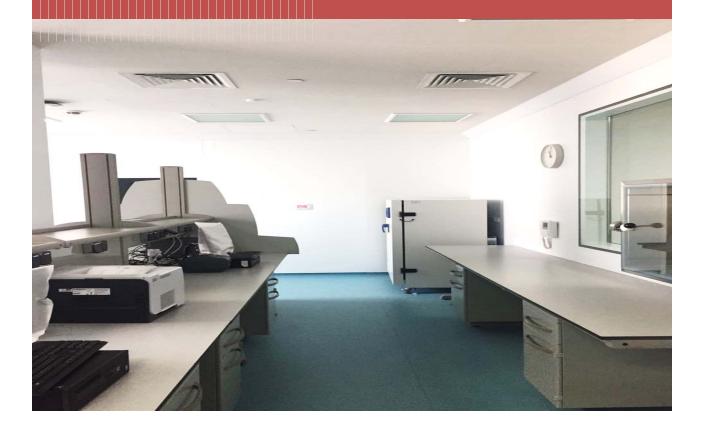


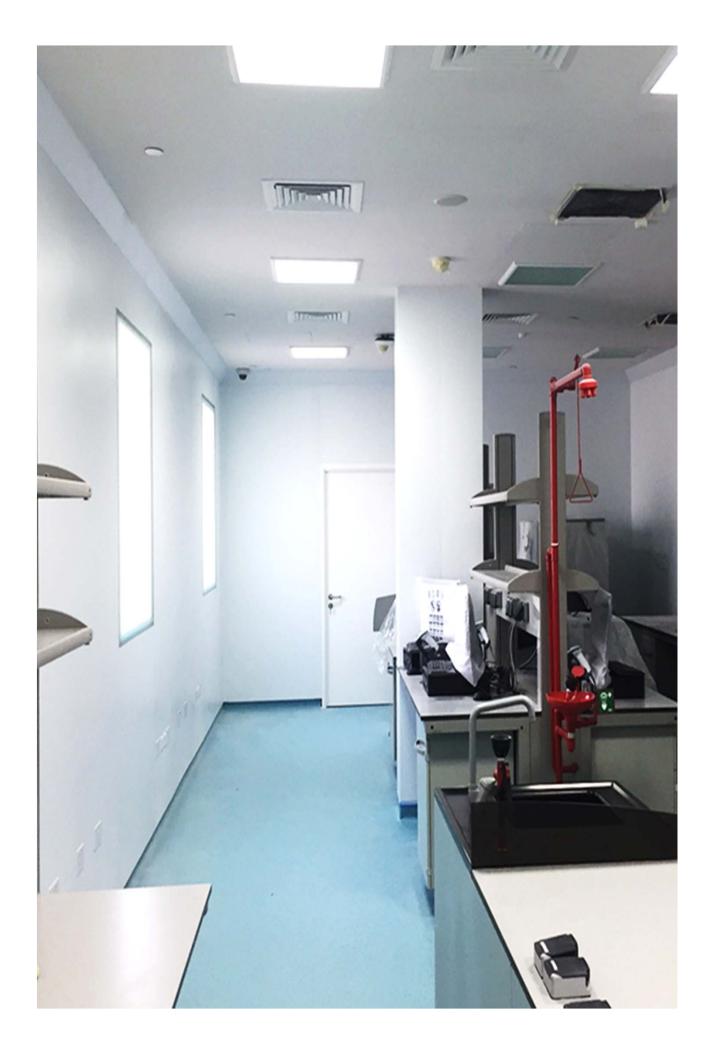




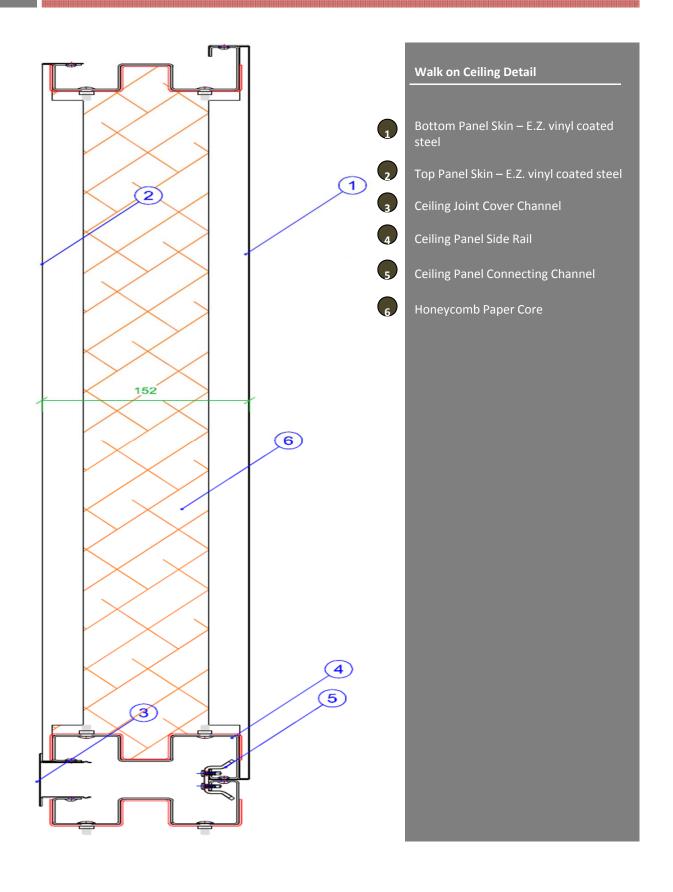


Proposed TB Unit





W.O.C. DETAILS



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