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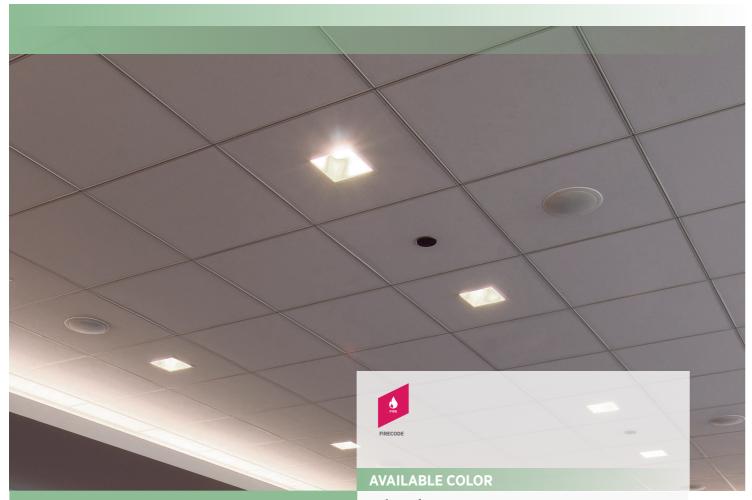
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DONN® BRAND DXF® FINELINE® SUSPENSION SYSTEM



PROFILE

EDGE DETAIL

FINELINE BEVELED - FLB

FINELINE - FL

FEATURES AND BENEFITS

- Narrow-profile, slotted grid system with 6.35mm reveal provides a streamlined appearance.
- Reveal accommodates partition attachments and pendant mounted light fixtures
- Mitered intersections offer a clean tailored annearance
- Optional integrated air diffuse
- Available in black/white and white/white options
- High recycled content (HRC) available
- ICC-ES evaluated for seismic installations (ESR-1222)

APPLICATIONS

- Fire-rated interior general-use areas
- All interior general-use areas



PRODUCT INFORMATION

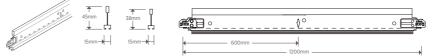
Description	Item Reference	Load*	Profile Color	Cross Section	Component Length
Main Runner	221DXBW01NZ	24KG/LM	Black & White	45/15mm	3600mm
	801DXFBW3000H38	17.5KG/LM	Black & White	38/15mm	3000mm
	801DXFBW3600-XH	17.5KG/LM	Black & White	38/15mm	3600mm
	801DXFW3600-XH	17.5KG/LM	White & White	38/15mm	3600mm
Long Cross Tee	221DXF003NZ		Black & White	45/15mm	1200mm
	803DXFBW1200-XH		Black & White	38/15mm	1200mm
	803DXFW1200-XH		White & White	38/15mm	1200mm
Short Cross Tee	221DXBW04NZ		Black & White	45/15mm	600mm
	804DXFBW600-XH		Black & White	38/15mm	600mm
	804DXFW600-XH		White & White	38/15mm	600mm
Wall Angle	802MT15-3600			24/15mm	3600mm
Wall Angle Shadowline	802MS3600			19/9/9/19mm	3600mm
U-Trim	UT123525 - UT124825 -	UT125325		25.4/12.7mm	3000mm

^{*}Load of 1200MM hanger spacing in KG/LM and deflection limit of L/360. Classified as Light, Intermediate or Heavy Duty when tested in accordance with ASTM C635.

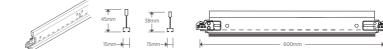
Main Runner 221DXBW01NZ / 801DXFBW3000H38 / 801DXFBW3600-XH / 801DXFW3600-XH

3000 / 3600mm - 3000 / 3600mm

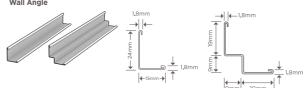
Long Cross Tee 221DXF003NZ / 803DXFBW1200-XH / 803DXFW1200-XH

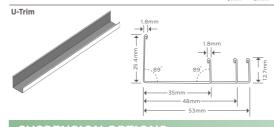


Short Cross Tee 221DXBW04NZ / 804DXFBW600-XH / 804DXFW600-XH



M-II A---I-





SUSPENSION OPTIONS

PHYSICAL DATA

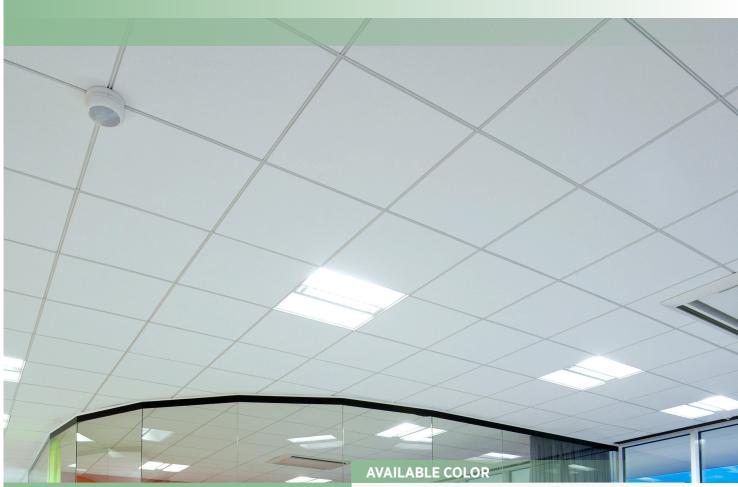
Material: Min. G30 pre-painted galvanized steel.

Installation: Install according to ASTM C636, ASTM E580 and USG requirements.

Limitations: For exposed grids in non-fire-rated, high-humidity applications, use USG Donn® Brand ZXLA™ painted suspension systems.

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DONN® BRAND DXI® IDENTITEE® SUSPENSION SYSTEM



FEATURES AND BENEFITS

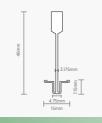
- Narrow-profile grid system with double 3.175mm reveal
- Seamless reveal at intersections
- Meets all code requirements, including seismic
- Compatible with USG ME Logix™ Integrated System
- Custom colors available
- ICC-ES evaluated for seismic installations (ESR-1222)
- G30 hot-dipped galvanized steel body and cap inhibit re rust.
- All USG Donn's Brand Identifiee's DXI'' Items have Hig Recycled
- · Content (HRC).
- Available in metric and imperial sizes
- Compatible with FLB and FL ceiling tile edges
- Proprietary cap lance allows various color and coating options to meet unique project requirements.
- Comply with CDPH 01350 V.2-2017 for low VOC emission.

APPLICATIONS

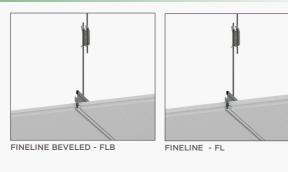
- All interior general-use areas
- USG Logix™ Integrated System



PROFILE



EDGE DETAIL



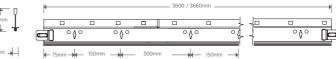
PRODUCT INFORMATION

Description	Item Reference	Load*	Cross Section	Component Length
Main Runner	DXI26HRC	24KG/LM	46/15mm	3600/366mm
Long Cross Tee	DXI424HRC		46/15mm	1200/1220mm
Short Cross Tee	DXI224HRC		46/15mm	600/610mm
Wall Angle	802MT15-3600		24/15mm	3600mm
Wall Angle Shadowline	802MS3600		19/9/9/19mm	3600mm
U-Trim	UT123525 - UT124	UT123525 - UT124825 - UT125325		3000mm

^{*} Load of 4" hanger spacing in KG/LM and deflection limit of L/360

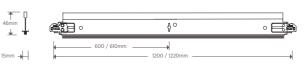
ain Runner DXI26HRC



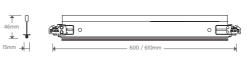


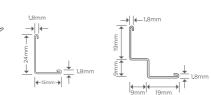
Long Cross Tee DXI424HRC



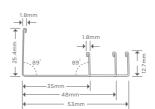


Short Cross Tee DXI224HRC









SUSPENSION OPTIONS



PHYSICAL DATA

Materia

Min. G30 hot-dipped galvanized steel body and cap. Baked-on polyester paint.

Installation

Install according to ASTM C636, ASTM E580 and USG requirements.

Limitations

- Please refer to USG Donn® Brand AX™ or ZXLA™ for exposed suspension systems in non-fire-rated, high-humidity applications.
- Interior applications only.

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DONN® BRAND DX®/DXL® T24 FIRE RATED SUSPENSION SYSTEM



FEATURES AND BENEFITS

- Fire Rated features a body and cap made of G30 hot-dip galvanized steel as per EN 10346/ASTM A653 with pre-painted

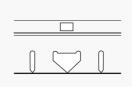
APPLICATIONS



PROFILE

FIRE LANCE





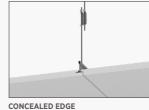
EDGE DETAIL





SQUARE EDGE - SQ

SHADOWLINE TAPERED - SLT



CONCEALED EDGE (BESK, S-BESK, D-BESK)

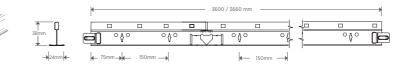


PRODUCT INFORMATION

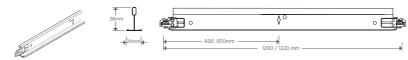
Description	Item Re Metric	ference Imperial	Cross Section	Body Thickness	Component Length	Reaction To Fire*
Main Runner	801DXL3600	801DXL3660	38/24mm	0.38mm	3600/3660mm	Class A
Long Cross Tee	803DX1200H38	803DX1220H38	38/24mm	0.30mm	1200/1220mm	Class A
Short Cross Tee	804DX600H38	804DX610H38	38/24mm	0.30mm	600/610mm	Class A
Wall Angle	802MT3600		22/19mm	0.50mm	3600mm	Class A
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9mm - 20/20mm	0.50mm	3600mm	Class A
U-Trim	UT123525 - UT124	UT123525 - UT124825 - UT125325		0.50mm	3000mm	Class A

^{*} As per EN 1364 : 2014 and EN 13501-1 : 2018

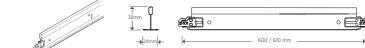
Main Runner 801DXL 3600

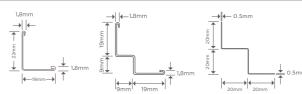


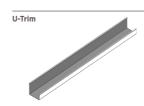
Long Cross Tee 803DX1200H38

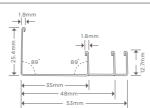


Short Cross Tee 804DX600H38

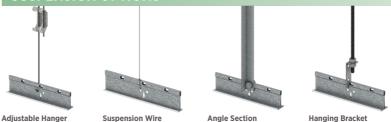








SUSPENSION OPTIONS



MAXIMUM ALLOWED OF TILES WEIGHT KG PER M2**

DXLH38 - T24 - Minimum Load - Carrying Capabilities of Main Runners

Hanger distance (mm)	Applied Load (N) at 1.2 M Span	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit		
900	365	304	3.33	L/360		
1200	274	228	3.33	L/360		
1500	219	183	3.33	L/360		

^{**} The load per m² must be distributed uniformly (no point loads) over the ceiling area. After loading, the deflection of any grid component will remain within the maximum deflection per span.

Consult USG Middle East technical team for layouts, load or hanger distance.

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DONN® BRAND DX®/DXL® T15 CENTRICITEE FIRE RATED SUSPENSION SYSTEM



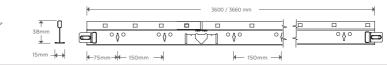
FINELINE - FL



Description	Item Re Metric	ference Imperial	Cross Section	Body Thickness		Reaction To Fire*
Main Runner	801DXLT15-3600	801DXLT15-3660	38/15mm	0.38mm	3600/3660mm	Class A
Long Cross Tee	803DXT15-1200H38	803DXT15-1220H38	38/15mm	0.30mm	1200/1220mm	Class A
Short Cross Tee	804DXT15-600H38	804DXT15-610H38	38/15mm	0.30mm	600/610mm	Class A
Wall Angle	802MT15-3600		24/15mm	0.50mm	3600mm	Class A
Wall Angle Shadowline	802MS3600		19/9/9/19mm	0.50mm	3600mm	Class A
U-Trim	UT123525 - UT12482	25 - UT125325	25.4/12.7mm	0.50mm	3000mm	Class A

* As per EN 1364 : 2014 and EN 13501-1 : 2018

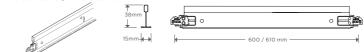
Main Runner 801DXLT15-3600



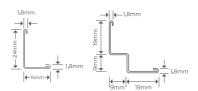
Long Cross Tee 803DXT15-1200H38

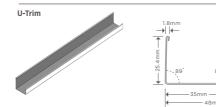


hort Cross Tee 804DXT15-600H38



Wall Angle





SUSPENSION OPTIONS Adjustable Hanger Suspension Wire Angle Section Hanging Bracket

MAXIMUM ALLOWED OF TILES WEIGHT KG PER M2**

DXL H38- T15 - Minimum Load - Carrying Capabilities of Main	Runners
---	---------

	Hanger distance (mm)	Applied Load (N) at 1.2 M Span	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit
	900	320	267	3.33	L/360
	1200	240	200	3.33	L/360
-	1500	192	160	3.33	L/360

^{**} The load per m² must be distributed uniformly (no point loads) over the ceiling area. After loading, the deflection of any grid component will remain within the maximum deflection per span.

Consult USG Middle East technical team for layouts, load or hanger distance.

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DONN® BRAND DXH® 38 T24 SUSPENSION SYSTEM



PROFILE

EDGE DETAIL

SQUARE EDGE - SQ

CONCEALED EDGE

SHADOWLINE TAPERED - SLT

FEATURES AND BENEFITS

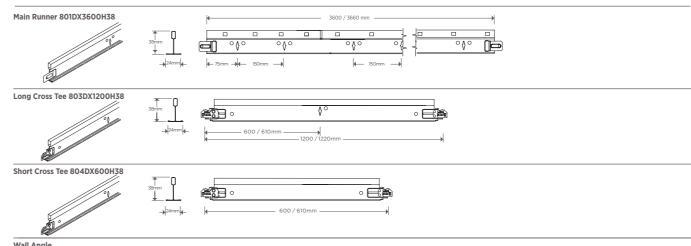
- The body and cap are made of G30 hot-dip galvanized steel as per EN 10346/ASTM A653 with pre-painted 24mm width capping to ensure the cap remains clean and rust-free.
- A four-step coating process that outperforms paint adhesion and corrosion resistance, as proven by industry-standard salt spray tests conducted by an independent laboratory.
- Safe, fast and, simple to install & easily accessible
- Maximum economy and design simplicity
- Cross-tees with override ends resist twisting and give a professionally finished look with no exposed steel edges.
- Patented QUICK-RELEASE™ clip design: demountable without
- tools.
- Compatible with Square, SLI, and Concealed ceiling tile edges
- Audible Click means you know when tees are connected.
- Complies with ASTM C635 and EN1396:2014
- Available in metric and imperial sizes

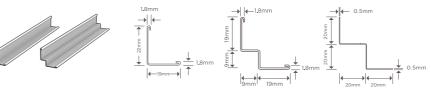
APPLICATIONS

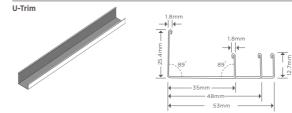
Interior general-use areas

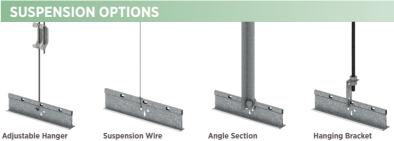


Description	Item F Metric	Reference Imperial	Cross Section	Body Thickness	Component Length
Main Runner	801DX3600H38	801DX3660H38	38/24mm	0.30mm	3600/3660mm
Long Cross Tee	803DX1200H38	803DX1220H38	38/24mm	0.30mm	1200/1220mm
Short Cross Tee	804DX600H38	804DX610H38	38/24mm	0.30mm	600/610mm
Wall Angle	802MT3600	802MT3600		0.50mm	3600mm
Wall Angle Shadowline	802MS3600 - 802	802MS3600 - 802MS164L		0.50mm	3600mm
U-Trim	UT123525 - UT124	825 - UT125325	25.4/12.7mm	0.50mm	3000mm









MAXIMUM ALLOWED OF TILES WEIGHT KG PER M^{2**}

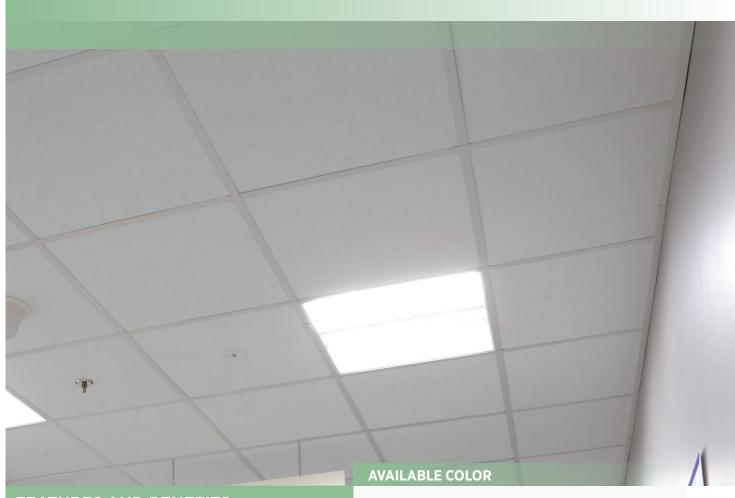
DXH 38 - T24 - Minimum Load - Carrying Capabilities of Main Runners

	Hanger distance (mm)	Applied Load (N) at 1.2 M Span	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit
	900	283	236	3.33	L/360
-	1200	212	177	3.33	L/360
	1500	170	142	3.33	L/360

^{*} The load per m² must be distributed uniformly (no point loads) over the ceiling area. After loading, the deflection of any grid component will remain within the maximum deflection per span.

Consult USG Middle East technical team for layouts, load or hanger distance.

DONN® BRAND AX™/AXCE™ SUSPENSION SYSTEM (ALUMINIUM)



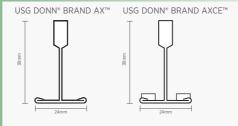
FEATURES AND BENEFITS

- Capable of withstanding cleaning and disinfecting chemicals as PROFILE

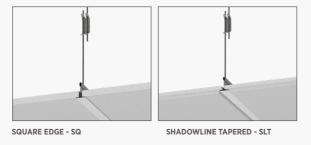
- Cross-tee override-ends resist twisting and give a

APPLICATIONS





EDGE DETAIL

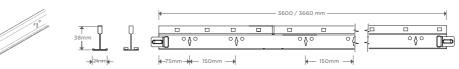


PRODUCT INFORMATION

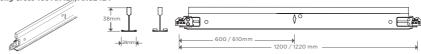
Description	Item Reference	Load*	Cross Section	Component Length					
Main Runner	AX26/AXCE26	10.5KG/LM	38/24mm	3600/3660mm					
Long Cross Tee	AX424/AXCE424		38/24mm	1200/1220mm					
Short Cross Tee	AX224/AXCE224		38/24mm	600/610mm					
Wall Angle	M7A/ M7ACE		22/22mm	3600mm					

^{*} Load of 4" hanger spacing in KG/LM and deflection limit of L/360

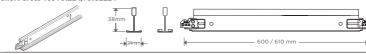
Main Runner AX26/AXCE26

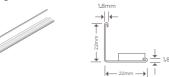


Long Cross Tee AX424/AXCE424



Short Cross Tee AX224/AXCE224





SUSPENSION OPTION



PHYSICAL DATA

Material

Double-web aluminium tee with aluminium cap and stainless steel Quick-Release™ clip. Baked-on polyester paint or powder-coated finish.

Installation

Install according to ASTM C636, ASTM E580 and USG requirements.

Limitations

- · Non-fire-rated applications only. Finish is not UV-resistant; should not be installed with direct exposure to sun or weather.
- Indirect exposure to severe environmental conditions may shorten the lifespan of the product.
- The gasket face applied to USG Donn® Brand AXCE™ contains a protective strip that must be removed prior to panel installation.
- The standard gasket is not recommended for installations with metal panels.
- If metal panels are desired, a special gasket suitable for metal panels may be applied to the USG Donn® Brand DXACE™ suspension system through special order.

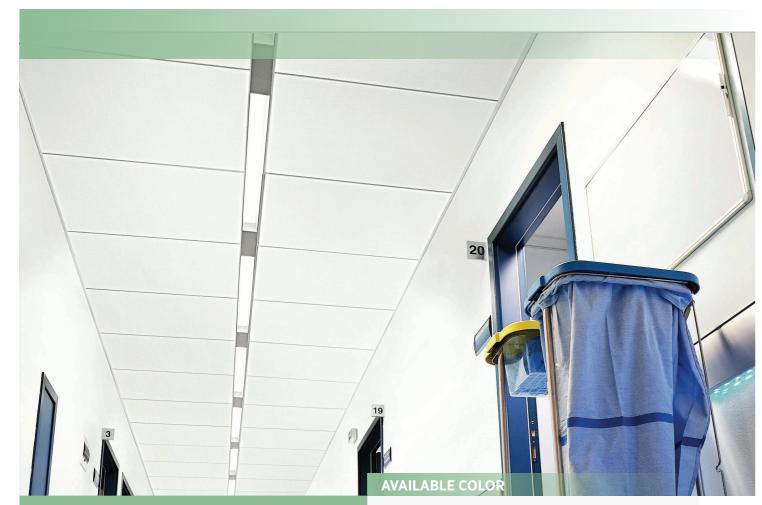
ASTM Load Compliance

Classified as Light, Intermediate or Heavy Duty when tested in accordance with ASTM C635.

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DONN® BRAND CE® SUSPENSION SYSTEM



FEATURES AND BENEFITS

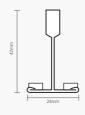
- Meets 2018 Guidelines for Healthcare Facilities.
- Grid system with factory-applied white, closed-cell foam gaskets for controlled-environments.
- Min. G30 hot-dipped galvanized body provides corrosio protection.
- Supports Clean Room HEPA filters and light.
- ICC-ES evaluated for building code compliance and seismic installations (ICC-ESR-1222).
- Capable of withstanding cleaning and/or disinfecting chemicals as tested in accordance with ASTM D402.

APPLICATIONS

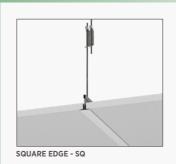
- Clean Rooms
- Hospital
- Food processing areas
- Healthcare facilities, restricted and semi-restricted areas
- Certified to meet ISO 14644-1 Class 5-8 (Fed. Standard 209E Class 100-100,000)



PROFILE



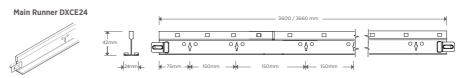
EDGE DETAIL

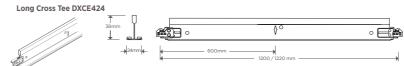


PRODUCT INFORMATION

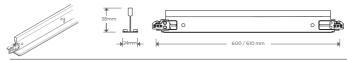
Description	Item Reference	Load *	Cross Section	Component Length
Main Runner	DXCE24	17.75KG/LM	42/24mm	3600/3660mm
Long Cross Tee	DXCE424		38/24mm	1200/1220mm
Short Cross Tee	DXCE224		38/24mm	600/610mm
Wall Angle	M7CE		22/22mm	3660mm
U-Trim	UT123525 - UT124825 - UT125325		25.4/12.7mm	3000mm

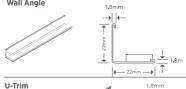
^{*} Load of 4" hanger spacing in KG/LM and deflection limit of L/360

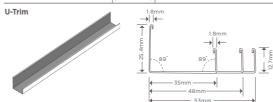


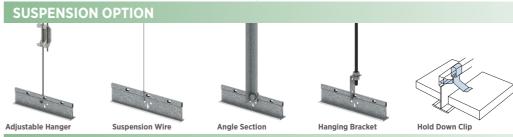


Short Cross Tee DXCE224









PHYSICAL DATA

Material

Min. G30 hot-dipped galvanized steel body and cap. Baked-on polyester paint.

Installation

Install according to ASTM C636, ASTM E580 and USG requirements. Class 5-8 (Fed. Standard 209E Class 100-100,000) installations require hold-down clips. Install a L15 hold-down clip within 76mm of each panel corner. For a 610mm x 1220mm system install an additional L15 hold-down clip centered on the 1220mm side. Border panels shall have a C-8 hold-down clip within 76mm of each panel corner. For a 610mm x 1220mm system install an additional C-8 hold-down clip centered on the 1220mm side. Alternative assemblies and installation methods may be utilized when approved by the authority having jurisdiction.

Limitations

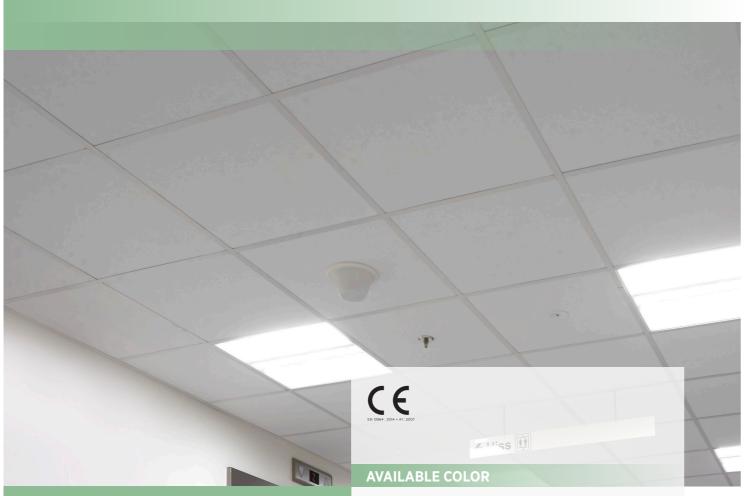
- Interior applications only
- The gasket face contains a protective strip that must be removed prior to panel installation.
- The standard gasket is not recommended for installations with metal panels.
- If metal panels are desired, a special gasket suitable for metal panels may be applied to the USG Donn® Brand CE™ Acoustical Suspension System through special order.

ASTM Load Compliance

Classified as Light, Intermediate or Heavy Duty when tested in accordance with ASTM C635.

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DONN® BRAND DX®/DXH® 33 T24 SUSPENSION SYSTEM



FEATURES AND BENEFITS

- Patented QUICK-RELEASE™ clip design: demountable without

APPLICATIONS



PROFILE



EDGE DETAIL



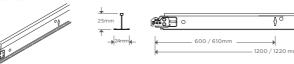


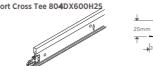
PRODUCT INFORMATION Description Item Reference Component Reaction Metric Imperial Section Thickness Length 801DX3600H33 801DX3660H33 Main Runner 33/24mm 0.30mm 3600/3660mm Class A 803DX1200H25 803DX1220H25 Long Cross Tee 25/24mm 0.30mm 1200/1220mm Short Cross Tee 804DX600H25 804DX610H25 25/24mm 0.30mm 600/610mm Class A 802MT3600 0.50mm Wall Angle 3600mm Class A Wall Angle Shadowline 802MS3600 - 802MS164L 19/9mm - 20/20mm | 0.50mm 3600mm Class A U-Trim UT123525 - UT124825 - UT125325 | 25.4/12.7mm Class A

* As per EN 1364 : 2014 and EN 13501-1 : 2018



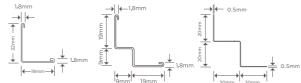
Long Cross Tee 803DX1200H25



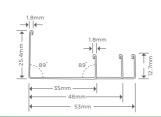












SUSPENSION OPTION



MAXIMUM ALLOWED OF TILES WEIGHT KG PER M2**

DVII 77 T24 Minimum Load Comming Canabilities of Main Dunner

DXH 33 - 124 - MINIM	H 33 - 124 - Minimum Load - Carrying Capabilities of Main Runners					
Hanger distance (mm)	r distance Applied Load Equivalent U (N) at 1.2 M Span Load (N/M)		Allowable Midspan Deflection (mm)	Deflection Limit		
900	208	173	3.33	L/360		
1200	156	130	3.33	L/360		
1500	125	105	3.33	L/360		

^{*} The load per m² must be distributed uniformly (no point loads) over the ceiling area. After loading, the deflection of any grid component will remain within the maximum deflection per span. Consult USG Middle East technical team for layouts, load or hanger distance.

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USG ME BRAND QUADRA T24 SAFE CEILING CARRIER



FEATURES AND BENEFITS

- USG ME Brand QUADRA T24 Safe Ceiling Carrier features a body and cap made of G30 hot-dip galvanized steel as per EN 10346/ ASTM A653 with pre-painted 24mm width capping to ensure that the cap remains clean and rust-free.
- A four-step coating process that outperforms paint adhesion and corrosion resistance, as proven by industry-standard salt spray tests conducted by an independent laboratory.
- Safe fast and simple to install & easily accessible.
- Maximum economy and design simplicity.
- Cross-tees with override ends resist twisting and give a professionally finished look with no exposed steel edges
- Compatible with Square and SLT ceiling tile edges.
- Exceeds load compliance specifications as per ASTM C 635
- Available in metric and imperial sizes

APPLICATIONS

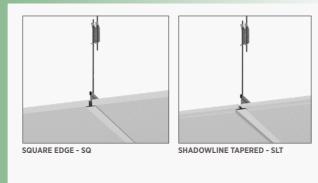
Interior general-use areas



PROFILE



EDGE DETAIL





PRODUCT INFORMATION

Description	Item Reference Metric Imperial		Cross Section	Body Thickness	Component Length
Main Runner	QG-MT3600H38	QG-MT3660H38	38/24mm	0.28mm	3600/3660mm
Long Cross Tee	QG-CT1200H25	QG-CT1220H25	25/24mm	0.28mm	1200/1220mm
Short Cross Tee	QG-CT600H25	QG-CT610H25	25/24mm	0.28mm	600/610mm
Wall Angle	QG-WA3600	QG-WA3600		0.40mm	3600mm
U-Trim	UT123525 - UT1248	UT123525 - UT124825 - UT125325		0.40mm	3000mm

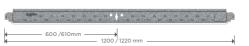
Main Runner QG-MT3600H38/QG-MT3660H38



Long Cross Tee QG-CT1200H25/ QG-CT1220H25







Short Cross Tee QG-CT600H25/QG-CT610H25

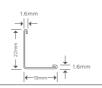


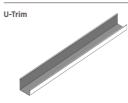


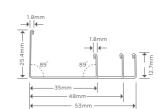


Wall Angle









SUSPENSION OPTION



Adjustable Hanger Suspen:

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Hanging Rra

MAXIMUM ALLOWED OF TILES WEIGHT KG PER M2**

DX QUADRA - T24 - Minimum Load - Carrying Capabilities of Main Runners

בו בו בו בו	Constitution and a contract of them terminal					
Hanger distance (mm)	Applied Load (N) at 1.2 M Span	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit		
900	199	220	3.33	L/360		
1200	149	165	3.33	L/360		
1500	119	132	3.33	L/360		

^{*} The load per m² must be distributed uniformly (no point loads) over the ceiling area. After loading, the deflection of any grid component will remain within the maximum deflection per span.

Consult USG Middle East technical team for layouts, load or hanger distance.

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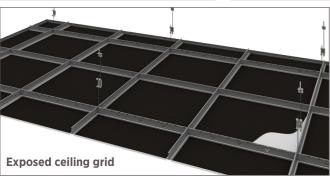


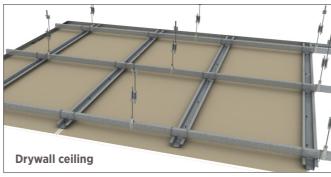
ROD HANGER & ADJUSTABLE BUTTERFLY CLIP











DESCRIPTION

Adjustable rod hanger system consists of top and bottom rod hangers with butterfly adjustment clip. The system is used to hang the suspension systems for the exposed ceiling grid and Drywall ceiling.

MECHANICAL PROPERTIES

Rod Hangers Diameter (mm)	Section Area (mm²)	Yield Strength (N/mm²)	Steel Mechanical Properties Tensile Strength (N/mm²)	Elongation (%)	Coating Weight (gms/m²)
2.6	5.599	275-300	410.0	21.0	125.0
3.50	9.621	275-300	414.0	21.0	125.0
3.75	11.044	275-300	436.0	21.0	125.0

NUMBER OF HANGERS PER 100 M²

- \bullet Space at 1200 x 1200mm 70 Sets for $100m^2$ exposed ceiling grid.
- \bullet Space at 1200 x 600mm 140 Sets for $100m^2$ exposed ceiling grid.

PACKAGING

- Top and Bottom Hanger 100 Pcs./ Bundle.
- Adjustable Butterfly Clip 500 Pcs./Box.

STORAGE

- Keep away from water dust and fire.
- Protect from corrosive chemicals.

ASTM & CODE STANDARDS

Adjustable Rod Hangers are designed, manufactured and installed in accordance with the requirements of ASTM 510, ASTM C635, ASTM636, ASTM 645 and ASTM E 580 (for seismic installs only)

Butterfly Clips are designed, manufactured and installed in full compliance with BS EN 13964:2014 A1:2006, Corrosion Protection to EN 2081:2008 Class D.

MATERIALS

Rod Hangers:

- Made from Galvanized Carbon Steel Wire
- Zinc Coating by Hot-Dip Process
- Wire Diameter 2.6, 3.5 and 3.75 mm
- Dynamic Load 250 N
- Length 250 mm to 3000 mm

Adjustable Butterfly Clip:

- Stainless Steel SUS 304H 0.50 mm (Gauge 25) thickness
- Size: 18 mm x 30 mm x 55 mm
- · Holes Diameter: 4 mm

BEARING ALLOWANCE

Minimum bearing allowance for top and bottom hangers must be 10 mm at both ends.



__10mm bearing allowance

GREEN BENEFITS AND RECYCLED CONTENT

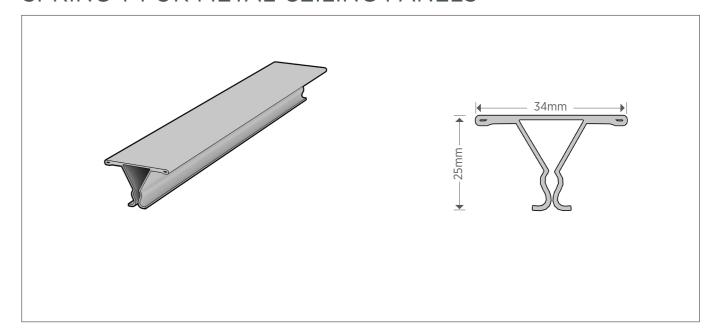
LEED Credit MR 2 – USG products are manufactured from cold formed steel. Steel is 100% recyclable, which helps divert debris from the waste stream.

LEED Credit MR 4 – USG's steel products have a minimum of 25.5% post-consumer recycled content, and 6.8% preconsumer.



GRIDS AND SUSPENSION

SPRING T FOR METAL CEILING PANELS



PRODUCT CATEGORY

Spring T Channels are concealed and attached to main primary channels through wire connecting clips. Their main role is to clamp the edge of the ceiling panels tightly at a defined interval.

MATERIAL PROPERTIES

Yield stress, FY 33 ksi Ultimate, with G40-G90 Zinc coating

DIMENSIONS

Thickness: 0.55 and 0.60 mm **Length**: 3,000 mm standard

Width: 34 mm Height: 25 mm

ASTM & CODE STANDARDS

- Spring T Channels are produced to meet or exceed ASTM C635 & ASTM C636
- Galvanized sheet steel meets or exceeds requirements of ASTM A-653

SECTION & MATERIAL PROPERTIES TABLE NOTES

									Steel Me	chanical Pro	perties
Туре	Thickness (mm)	Spring T Cross Section Height (mm)	Spring T Depth (mm)	Section Area (mm²)	Centroid (mm)	Moment of Inertia(Ixx) (mm ⁴)	Section Modulus (Sx)(mm ³)	Radius of Gyration (mm)	Yield Strength N/mm²	Tensile Strength N/mm²	Elongation (%)
Spring T	0.55	25	25	69.3	8.76	5,524.00	315.80	8.93	297-308	366-372	30-31
	0.60		25	75.6	8.76	5,978.00	342.13	8.89	297-308	366-372	30-31

GREEN BENEFITS AND RECYCLED CONTENT

LEED Credit MR 2 – USG products are manufactured from cold formed steel. Steel is 100% recyclable, which helps divert debris from the waste stream.

LEED Credit MR 4 - USG's steel products have a minimum of 25.5% post-consumer recycled content, and 6.8% pre-consumer.

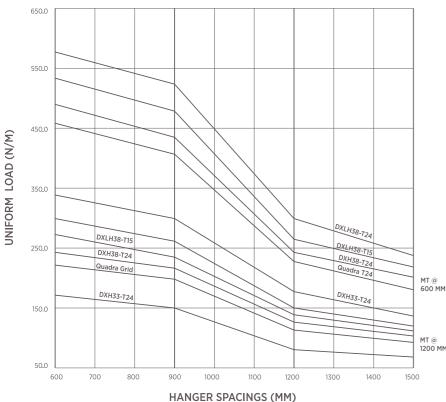
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DONN® SUSPENSION SYSTEM LOADINGS

Use of Maximum Allowable Gross Ceiling Weight Charts:

- Determine the maximum allowable ceiling weight for the chosen Main Tee and hanger spacing from Graph.
- Determine the maximum allowable ceiling weight for the chosen Cross Tee spacing from table.
- The maximum allowable gross weight is the lower of the values from step 1 and 2.
- · Note that any heavy lighting or other mechanical fixtures should be independently supported.
- Seismic considerations for in-plane loads may take precedence in determining the required section (refer USG ME Representative for details).

MAIN TEE



HANGER SPACINGS (MM

 $\label{thm:minimum load} \mbox{Minimum load carrying capabilities of main runners spaced at 1200mm and 600mm On Center.}$

DONN® DX Main Tee	Point Load KG hanger	Point Load KG hanger
	spacing - 600mm OC	spacing - 1200mm OC
DX3600H38	15.65	7.9
DX3600H33	10.35	5.5

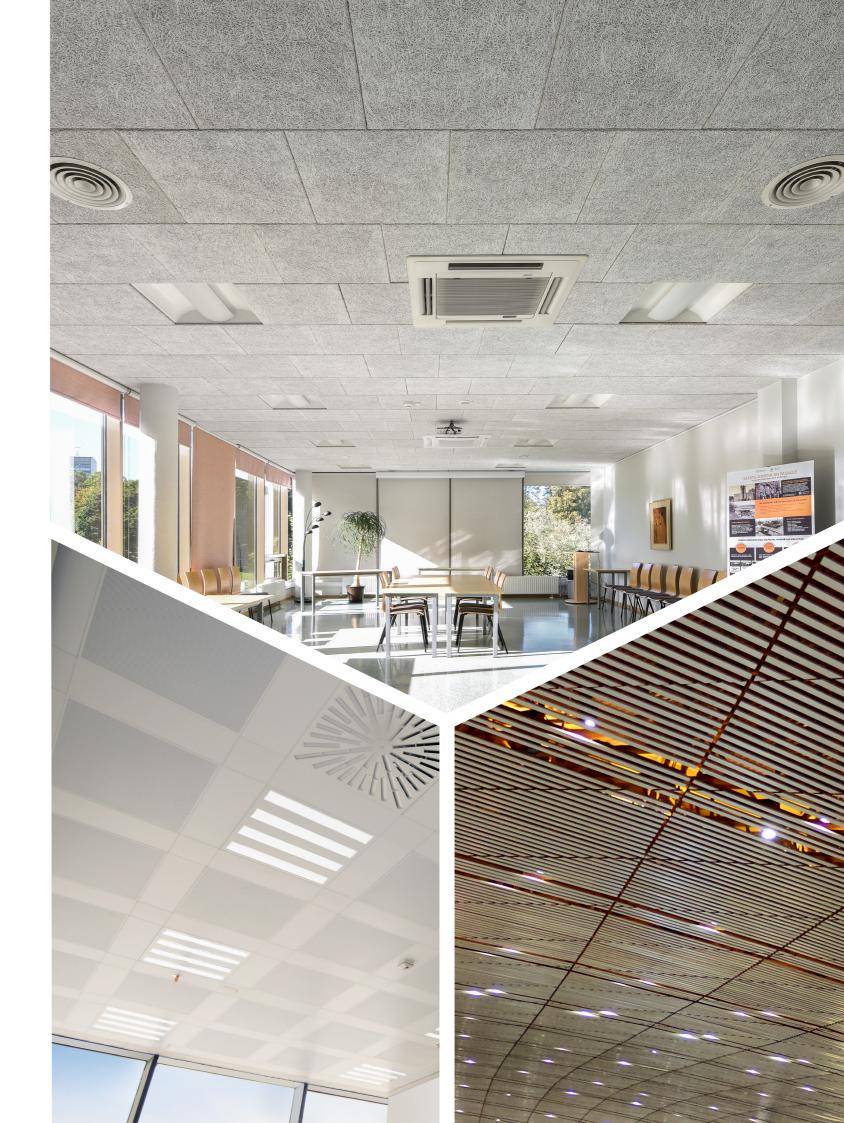
Point loads are loads that transfer to a Tee at a single point (or several points) over a very small area. The weakest point is assumed to be mid span. The maximum allowable point load is the lesser of either main or cross Tee values.

CROSS ILL		
DONN® DX	Cross Tee Sp	cing
Cross Tee Type	600mm	1200mm
DX600H25	40	20
DX1200H38	80	40
DX1200H25	40	20

Notes

CDOSS TEE

- Values are based on simple span tests in accordance with recognized International Standard ASTM C635. Higher values can often be attained by allowing for the effect of continuous spans, the actual increase being subject to span arrangements.
- For cross-nogged configurations e.g.: where a 1200x600 mm panel runs parallel with the main tee, the spacing values should be used as for 1200x1200mm module.
- Main tees are based on a 1200mm span, creating a 600x600mm configuration does not significantly increase load carrying limits.



CATEGORIES D, E, AND F CATEGORY C AS PER IBC

Since 1957 DONN® brand suspension systems have set the standard, using the strongest gauge steel to produce the tightest systems available with the greatest lateral and torsional stiffness. Building on this commitment to quality, USG teamed with the University at Buffalo (SUNY), the Department of Civil, Structural and Environmental Engineering – Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley to conduct full-scale seismic testing to evaluate and qualify the seismic performance of these systems. This testing proved that DONN® suspension systems provide a superior code-compliant solution to meeting International Building Code (IBC) requirements, including installations in Categories D, E and F, and Category C. USG is the only manufacturer to team with two separate earthquake engineering laboratories to qualify the performance of our systems.

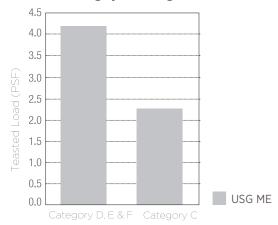
When seismic requirements are a critical design issue, architects, contractors and building officials can rely on DONN® suspension systems to:

- Meet or exceed all national code requirements with 22mm wall molding.
- Fulfill requirements for IBC seismic design categories C, D, E, and F.
- Provide evidence of compliance (and greatly exceed) ICC Evaluation Service, Inc. (ICC-ES) AC156 and AC368 requirements.
- · Offer an aesthetically attractive option to traditional 5mm angle molding.
- Provide approved solutions certified with the maximum m². weights accommodating complete ceilings systems.
- · Offer compliant systems tested and verified by two separate earthquake engineering laboratories.
- · Offer a seismic clip laboratory-tested to greatly exceed all structural requirements including tension, compression & tee fallout.

SEISMIC QUALIFICATION / SPECIFICATIONS

Seismic testing typically focuses primarily on the suspension system itself. Any ceiling panel can be installed in the test assembly regardless of how little it weighs, and components such as light fixtures and air handling equipment are usually excluded. In practical application, however, the suspension system must support and carry the weight of a fully functional ceiling system, including ceiling panels that can weigh as much as 1kg m²./sq. Therefore, USG tested suspension systems with weights commensurate with those found in real-world installations, including light fixtures and air handling equipment, using a wide variety of the ceiling panels that USG ME offers. Full-scale testing performed at the University at Buffalo (SUNY) the department of Civil, Structural and Environmental Engineering – Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley certifies that USG ME IBC-compliant assemblies are able to accommodate loads commensurate with those found in real-world installations.

Maximum Ceiling System Weight Tested



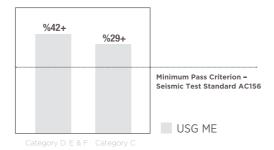
Seismic Design Category

The USG figures presented are based on full-scale testing and evaluation performed at the University at Buffalo (SUNY) the department of Civil, Structural and Environmental Engineering – Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley. Comparative data obtained from public sources includes ICC-ES Reports, product literature and Web sites.

TESTING

A complete range of USG ceiling systems was subjected to various levels of earthquake acceleration levels for the purpose of seismic qualification. The experimental studies were performed in the University at Buffalo (SUNY) the department of Civil, Structural and Environmental Engineering • Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley using an earthquake simulator. System performance was certified to tolerate forces in seismic Categories D, E and F that exceeded the minimum pass criterion of AC156 and AC368 by 42%.

USG ME Exceeds AC156 Test Criteria



Seismic Design Category

Testing per ICC Evaluation Service, Inc. (ICC-ES) AC156 and AC368:

System Design	Seismic Design Category	Maximum Ceiling System Weight Tested	Allowed Suspension System Load Carrying Capacity	Test Result
System DXL-H	D,E,F	12.2 kg/m ²	Heavy Duty	Passed
System DXL-I-C	С	11 kg/m²	Intermediate Duty	Passed

With these certified IBC-compliant assemblies, USG ME is the only manufacturer to offer:

- A seismic system that exceeds the minimum pass criterion of AC156 and AC368 by more than 42%.
- Seismic-system weights commensurate with typical ceiling systems.
- A seismic clip laboratory-tested to greatly exceed all structural and seismic requirements including tension, compression and tee fallout.
- · Compliant systems tested and verified by two separate earthquake engineering laboratories.

CODE APPROVAL

Testing and evaluation performed at the University at Buffalo (SUNY), the Department of Civil, Structural and Environmental Engineering – Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley qualify the performance of these systems according to the AC156 – Seismic Qualification Specification, and AC368 – Acceptance Criteria for Suspended Ceiling Framing Systems. Several alternative materials, designs and methods of construction were evaluated and tested. Results of this investigation indicate that these tested alternative designs are at least the equivalent of that prescribed in the code for quality, strength, effectiveness, fire resistance, durability and safety. The data and test results presented provide technical evidence on which a code official can base approval. Construction details for these systems are shown on the following pages.

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CATEGORIES D, E, AND F CATEGORY C AS PER IBC

SEISMIC TEST RESULTS System Design System DXL-H System DXL-I-C **Seismic Category** D, E, F DFF **Suspension System** DONN® double-web, DONN® double-web, hot-dipped galvanized steel meeting or hot-dipped exceeding galvanized steel meeting or exceeding ASTM C635 ASTM C635

Duty rating Heavy Duty Heavy Duty 22mm 22mm Wall molding

ACM7

12.2kg/m²

Shake Table Six degrees of freedom Six degrees of freedom

Test Protocol Simulated earthquake Simulated earthquake AC156 and AC368 AC156 and AC368

Passed Passed Result

ACM7

Seismic Clip

Qualification

System Weight

Minimum Acceleration Requirement Exceeds by 42% Exceeds by 42%

Two Adjacent Floating Sides - With Gap Fastener attachment to tee through slot Fastener attachment to tee through slot optional), no fastener through wall molding optional), no fastener through wall molding

Two Adjacent Fixed Sides - Tight, No Fastener attachment to tee (optional), one fastene Fastener attachment to tee (optional), one through wall molding (optional) fastener through wall molding (optional)

Perimeter Wires No No Stabilizer Bars

12.2kg/m²

Convenience holes located in the tee bulb may be used for any and all hanger wires. Load tests performed on 12-gauge hanger wires through convenience holes found the failure to be in excess of 180kg. This far exceeds the required 90kg. The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.

SYSTEMS SUMMARY

STSTEMS SOMMART	STOTE NO SOTIMARY					
	Category D,E,F Alternate Seismic Application	Standard Seismic Application				
	DXL-H					
	Heavy Duty DXL-H System 22mm Molding	Heavy Duty System 5mm Molding				
Suspension System Duty Rating	Heavy	Heavy				
Wall Molding	22mm	5mm				
Seismic Clip	ACM7	None				
Two Adjacent Floating Sides – With Gap	ACM7 seismic clip with fastener attachment to tee through slot (optional), and no fastener through wall molding	No attachment of tee to molding				
Two Adjacent Fixed Sides – Tight, No Gap0	ACM7 seismic clip with fastener attachment to tee (optional), and one fastener through wall molding (optional)	Pop-rivet attachment of tee to molding				
Perimeter Hanger Wires	Yes	Yes				
Stabilizer Bars	None	Yes				
	Category C Alternate Seismic Application	Standard Seismic Application				
	DXL-I-C					

	Category C Alternate Seismic Application	Standard Seismic Application
	DXL-I-C	
	intermediate Duty System 22mm Molding	Intermediate Duty System 22mm Molding, Stabilizer Bars
Suspension System Duty Rating	Heavy	Heavy
Wall Molding	22mm	5mm
Seismic Clip	ACM7	None (unless utilized in lieu of stabilizer bar)
Two Adjacent Floating Sides – With Gap	ACM7 seismic clip with fastener attachment to tee through slot (optional), and no fastener through wall molding	No attachment of tee to molding
Two Adjacent Fixed Sides – Tight, No Gap0	ACM7 seismic clip with fastener attachment to tee (optional), and one fastener through wall molding (optional)	Pop-rivet attachment of tee to molding
Perimeter Hanger Wires	Yes	None
Stabilizer Bars	None	Yes

Convenience holes located in the tee bulb may be used for any and all hanger wires. Load tests performed on 12-gauge hanger wires through convenience holes found the failure to be in excess of 180kg. This far exceeds the required 90kg. The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown.

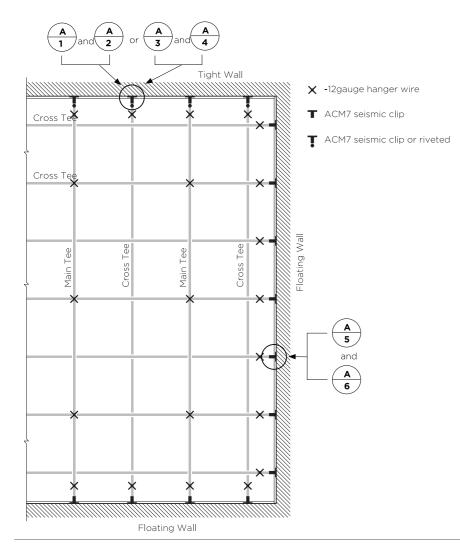
other manufacturers were not evaluated, and their use or any mixed use is not recommended.

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CATEGORIES D, E, AND F CATEGORY C AS PER IBC

SYSTEM SUMMARY	
Suspension System Duty Rating	Heavy
Wall Molding	22mm
Seismic Clip	ACM7
Two Adjacent Floating Sides – With Gap	3/49 gap; ACM7 seismic clip with fastener attachment to tee through slot (optional), and no fastener through wall molding.
Two Adjacent Fixed Sides – Tight, No Gap	Tight, no gap; ACM7 seismic clip with fastener attachment to tee (optional), and one fastener through wall molding (optional)
Perimeter Hanger Wires	Yes
Stabilizer Bars	None

CONSTRUCTION DETAILS



All main DONN® suspension systems – DX/DXL, Fineline DXF, Fineline 1/8 DXFF, Centricitee DXT/DXLT, CE, DXW, DXLA, and ZXLA – include the Code compliment and heavy-duty main tees for Seismic

Design Categories D, E, and F.

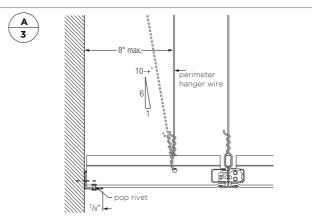
For ceiling areas exceeding (232 m^2), a seismic separation joint may be required. See SC2496 for information on seismic separation joints.

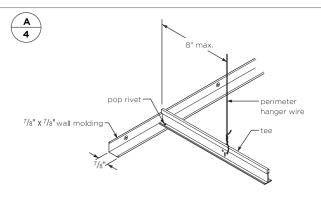
The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.

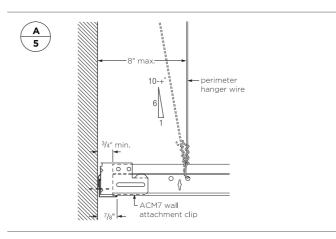
Convenience holes located in the tee bulb may be used for any and all hanger wires.

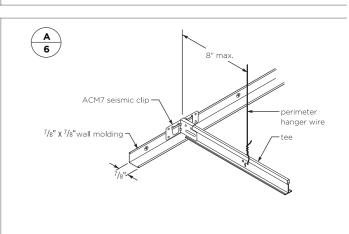
ACM7 CLIP, TIGHT WALL









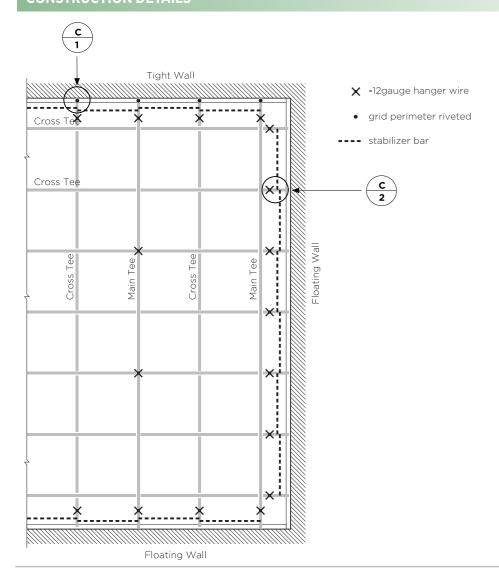


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CATEGORIES D, E, AND F CATEGORY C AS PER IBC

SYSTEM SUMMARY		
Suspension System Duty Rating	Heavy	
Wall Molding	5mm	
Seismic Clip	ACM7	
Two Adjacent Floating Sides – With Gap	None (unless utilized in lieu of stabilizer bars)	
Two Adjacent Fixed Sides – Tight, No Gap	19mm gap; no attachment of tee to molding	
Perimeter Hanger Wires	Yes	
Stabilizer Bars	Yes	

CONSTRUCTION DETAILS



All main DONN® suspension systems – DX/DXL, Fineline DXF, Fineline 1/8 DXFF, Centricitee DXT/DXLT, CE, DXW, DXLA, and ZXLA – include the Code compliment heavy-duty main tees for Seismic Design Categories D, E, and F.

For ceiling areas exceeding 232 m², a seismic separation joint may be required. See SC2496 for information on seismic separation joints.

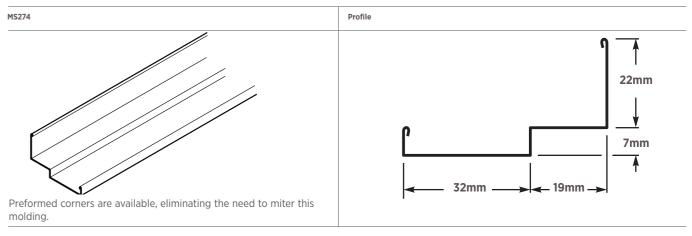
The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.

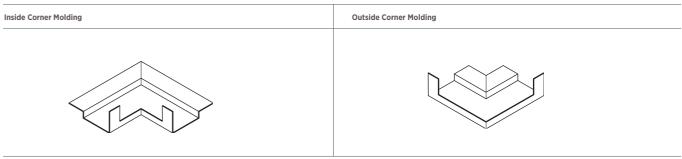
Convenience holes located in the tee bulb may be used for any and all hanger wires.

ACM7 CLIP, TIGHT WALL Pop Rivet, Tight Wall 2" x 2" wall molding hanger wire pop rivet stabilizer tee

5MM SEISMIC SHADOW MOLDING

With a 19mm reveal located by the wall to disguise its width, 5mm shadow molding provides an aesthetically pleasing option to traditional 5mm seismic molding. Designed for use with 24mm exposed DONN® DX/DXL suspension systems, this seismic shadow molding meets or exceeds all national code requirements and fulfills requirements for Seismic Design Categories D, E, and F.





For more information about the MS274 5mm seismic shadow molding, see Seismic Mold data sheet (AC3184) or Ceiling Systems catalogue (SC2000).

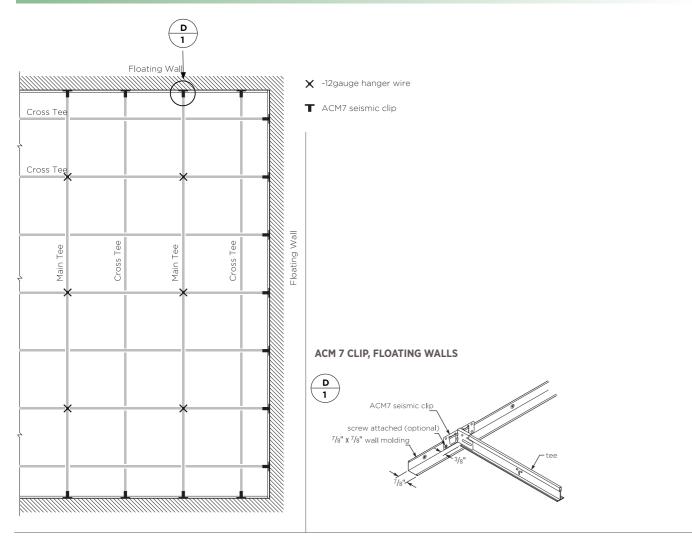
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CATEGORY C ALTERNATE SEISMIC APPLICATION

INTERMEDIATE DUTY DXL-I-C SYSTEM 22MM MOLDING

SYSTEM SUMMARY	
Suspension System Duty Rating	Intermediate
Wall Molding	22mm
Seismic Clip	ACM7
Two Adjacent Floating Sides – With Gap	ACM7 seismic clip with fastener attachment to tee through slot (optional), and one fastener through wall molding (optional).
Two Adjacent Fixed Sides – Tight, No Gap	Tight, no gap; pop-rivet attachment of tee to molding
Perimeter Hanger Wires	None
Stabilizer Bars	None

CONSTRUCTION DETAILS



All main DONN® suspension systems - DX/DXL, Fineline DXF, Fineline 1/8 DXFF, Centricitee DXT/DXLT, CE, DXW, DXLA, and ZXLA – include the Code compliment intermediate-duty main tees for Seismic Design Categories A, B and C.

The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.

and all hanger wires. Alternate Seismic Application

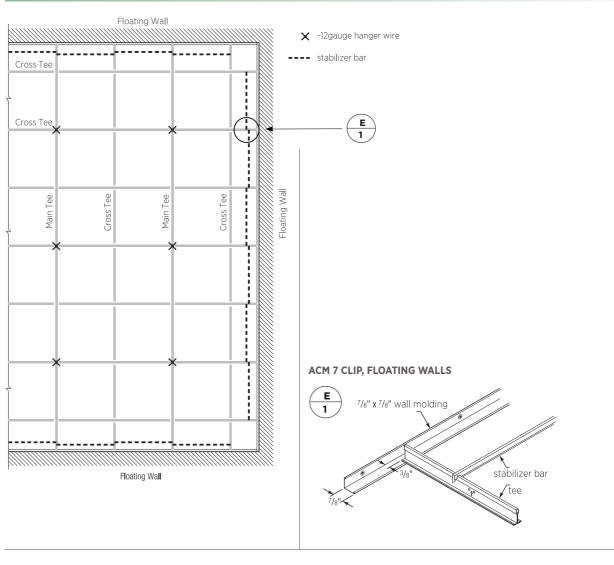
Convenience holes located in the tee bulb may be used for any

CATEGORY C ALTERNATE SEISMIC APPLICATION

INTERMEDIATE DUTY SYSTEM 22MM MOLDING, STABILIZER BARS

SYSTEM SUMMARY	
Suspension System Duty Rating	Intermediate
Wall Molding	22mm
Seismic Clip	None
Floating Sides	10mm gap; no attachment of tee to molding
Perimeter Hanger Wires	None
Stabilizer Bars	Yes

CONSTRUCTION DETAILS



All main DONN® suspension systems - DX/DXL, Fineline DXF, Fineline 1/8 DXFF, Centricitee DXT/DXLT, CE, DXW, DXLA, and ZXLA – include the Code compliment intermediate-duty main tees for Seismic Design Categories A, B and C.

The performance of DONN® seismic systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.

Convenience holes located in the tee bulb may be used for any and all hanger wires. Standard Seismic Application

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ADDITIONAL RESOURCES WHERE EVERY DETAIL IS AN ASSET



EDGE DETAILS

MODULAR CEILING INSTALLATION

LAY-IN CLIP-IN D-BESK CONCEALED S-BESK CONCEALED

SUSPENDED CEILING GRID PACKAGING

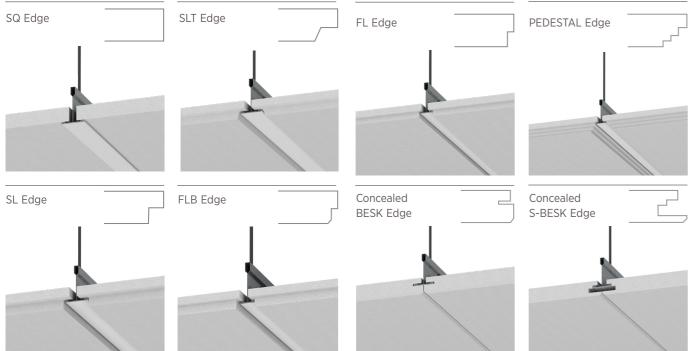
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EDGE DETAILS

Concealed D-BESK Edge

ACOUSTICAL CEILING TILE EDGE DETAILS





DONN® and Quadra are the most widely specified grids in Middle East. They include a wide range of profiles and colors and are fully compatible with all USG ME ceiling tiles as well as most third party brands. Precision design and quality manufacturing ensure both structural and aesthetic integrity in all ceiling designs.

USG ME offers the following suspension system and edge detail options. Select a suspension system and match it with a corresponding panel edge detail, or vice versa, to assure proper system fit and assembly.

EDGE DETAIL	SQ Edge	SLT Edge	SL Edge	FLB Edge	FL Edge	Pedestal	Concealed BESK Edge	Concealed S-BESK Edge	Concealed D-BESK Edge
GRID SYSTEM									
DX*/DXL™ T24 QUADRA	1	1	1						
DX°/DXH™ 33 T24	1	-	-						
DX°/DXH™ 38 T24	1	1	1				1	1	1
DX°/DXL™ T24 FIRE RATED	*	1	1				1	1	
DX*/DXL™ T15 CENTRICITEE	*				-				
AX™/AXCE™	1			-	-				
CE TM	1								
FINELINE* DXF™/DXLF™				*	*				
DENTITEE*									
DONN" CONCEALED								1	
DONN CONCEALED C,L							1		

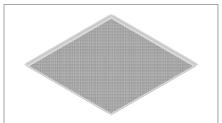
MODULAR CEILING INSTALLATIONLAY-IN

LAY-IN CEILING INSTALLATION PROCEDURE

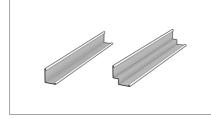
The appearance of a suspended acoustical ceiling depends on the materials used and on the quality of the installation. USG ME manufactures components to meet ASTM C635, assuring that the material, structural, and quality standards are as prescribed. Install according to ASTM C636, ASTM E580, and USG ME requirements, assuring proper level and secure attachment as prescribed. To ensure an impeccable installation, it's imperative to maintain the cleanliness and dryness of the ceiling elements during transportation and storage and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is completed.



COMPONENTS







Main Tee, Long Cross Tee, Short Cross Tee Perimeter Wall Angle (Shadowline Wall Angle, L Angle)

HANGING OPTIONS

Ceiling Tile









Angle Section

Hanging Bracket

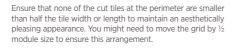
INSTALLATION

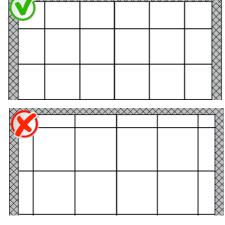


Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules toward the perimeter based on the tile size as shown in figures 4.1 & 4.2.



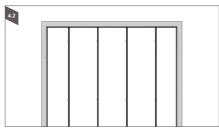
Secure the perimeter wall angle at the specified ceiling height.







Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.



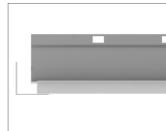
Progressing in modules towards the perimeter.

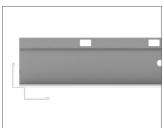


Insert the short cross tee to long tee in place.



DONN® brand audible click

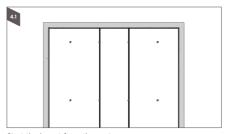




Grid installation at the leg for tapered tile edge

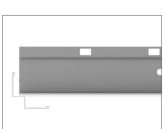
Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.

Fix the main tee at 1200 mm spacing and lay it on the wall

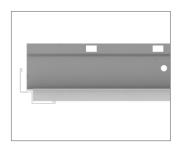




Insert the long cross tee to the main tee in place at 600 mm



Shadowline Wall Angel top



Grid installation at the Shadowline Wall Angel bottom leg for square tile edge

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MODULAR CEILING INSTALLATION CLIP-IN

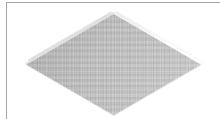
CLIP-IN CEILING INSTALLATION PROCEDURE

The appearance of a suspended acoustical ceiling depends on the materials used and on the quality of the installation. USG ME manufactures components to meet ASTM C636, 2006 IBC (2007 CBC), CISCA Ceiling Systems Handbook (UL Design), and any applicable code requirement, assuring that the material, structural, and quality standards are as prescribed. Install according to ASTM C636, ASTM E580, and USG requirements, assuring proper level and secure attachment as prescribed. To ensure an impeccable installation, it's imperative to maintain the cleanliness and dryness of the ceiling elements during transportation and storage and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is completed.



COMPONENTS

Ceiling Tile







Primary Channel



Wire Connecting Clip- WCC

HANGING OPTIONS

Adjustable Hanger



Suspension Wire





Hanging Bracket

INSTALLATION



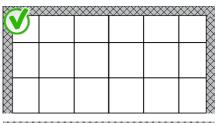
Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules toward the perimeter based on the tile size as shown in figures 4.1 & 4.2.

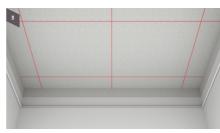


Secure the perimeter wall angle at the specified ceiling

Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by ½

module size to ensure this arrangement.

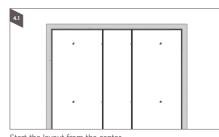




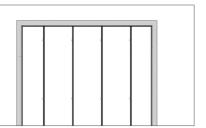
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.

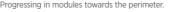


Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



Start the layout from the center.



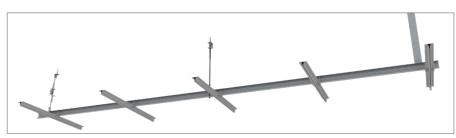




Fix the primary channel at 1200 mm spacing

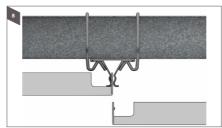


Hang the wire connecting clip WCC to the primary channel





Connect the spring tee to the primary channel at 600 spacing using wire connecting clip WCC





Insert the clip-in panel into the exposed spring tee

Important Tips:

- Ensure that the ceiling grid is level and straight throughout the installation process.
- Always use safety gear such as gloves and eye protection when handling the metal ceiling components. Cut the metal ceiling panels with the appropriate tools to ensure clean cuts and prevent damage to the panels
- Do not apply excessive force when inserting the clip in the panel as this may cause damage to the ceiling components.

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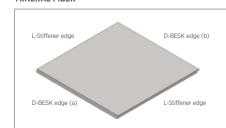
MODULAR CEILING INSTALLATION D-BESK CONCEALED

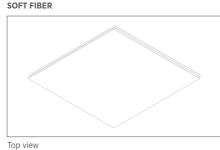
D-BESK CONCEALED CEILING INSTALLATION PROCEDURE

The D-BESK concealed system boasts a sleek, monolithic aesthetic achieved through concealed ceiling profiles. Ceiling tiles are a demountable option that caters to various construction preferences. Depending on specific needs, the ceiling void can be made retrospectively accessible or permanently sealed. Every USG ME's D-BESK concealed system component is designed for individual demounting. To ensure an impeccable installation, it's imperative to maintain the cleanliness and dryness of the ceiling elements during transportation and storage and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is completed.



D-BESK CONCEALED MINERAL FIBER



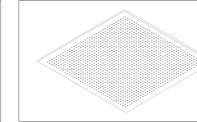




D-BESK concealed section.

Top view

GYPSUM TILE



Bottom view

COMPONENTS



Bottom view: To preserve tile stability and prevent warping,

Main Tee



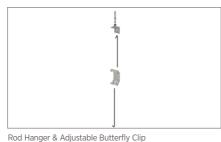
not required for Soft Fiber or Gypsum Tiles.







Stabilizer Bar

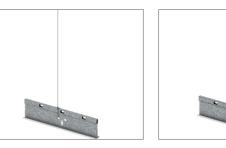


HANGING OPTIONS



Adjustable Hanger

Suspension Wire

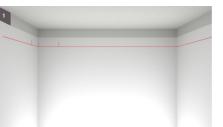


Angle Section



Hanging Bracket

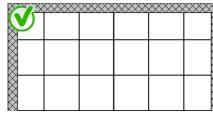
INSTALLATION

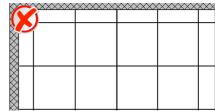


Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules toward the perimeter based on the tile size as shown in figures 4.1 & 4.2.



Secure the perimeter wall angle at the specified ceiling





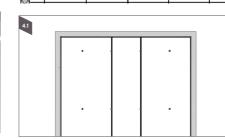
Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by $\frac{1}{2}$ module size to ensure this arrangement.



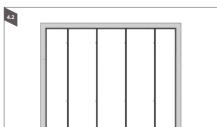
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 600 mm o.c using a laser for accuracy.



Fix hangers at 600 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



Start the layout from the center.



Progressing in modules towards the perimeter

tiles accessibility. Refer to the diagram

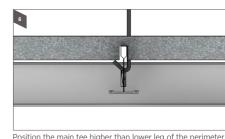


Install the main tee profiles at 600 mm spacing, positioning them higher than the lower leg of the perimeter U trim as





towards the perimeter. Progress row by row until the ceiling



Position the main tee higher than lower leg of the perimeter U trim by 10 mm to perfectly fit the tile inside the U trim for

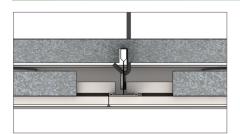


Section of D-BESK mineral fiber tiles installation on the U. trim without L-Stiffener.

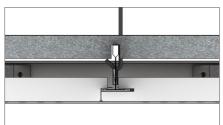
Start tile installation starting from the center of the room Use a stabilizer bar at intervals of 1200 mm to fix the main runners. Ensure the stabilizer bars are placed adjacent to the hangers, allowing every second tile to remain passable. is fully installed. The stabilizer bar should be placed in a way to maintain the

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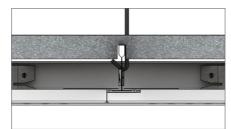
MODULAR CEILING INSTALLATION D-BESK CONCEALED D-BESK CONCEALED (INSTALLATION)



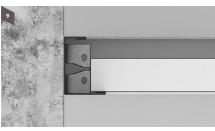
with L-Stiffener.



Section of D-BESK mineral fiber tiles installation on the U trim. Section of D-BESK soft fiber tiles installation on the U trim.



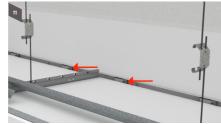
Section of the concealed gypsum tiles installation on the



If the room requires cut-tiles at the perimeter, cut the tiles to be 10 mm smaller than the clearance between the tile and



Secure all perimeter tiles with U-Trim using butterfly clips, which will function as springs to push the tiles towards the



Method of fixing the butterfly clips and the stabilizer bar.



Individually demount each tile in this system for maintenance. To remove any tile, slightly raise the tiles on one side until they can be slid off the main profile.





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MODULAR CEILING INSTALLATION S-BESK CONCEALED

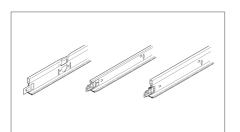
S-BESK CONCEALED CEILING INSTALLATION

The S-BESK concealed system boasts a sleek, monolithic aesthetic achieved through concealed ceiling profiles. Ceiling tiles are a demountable option that caters to various construction preferences. Depending on specific needs, the ceiling void can be made retrospectively accessible or permanently sealed. Every USG ME's S-BESK concealed system component is designed for individual demounting. To ensure an impeccable installation, it's imperative to maintain the cleanliness and dryness of the ceiling elements during transportation and storage and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is completed.

COMPONENTS

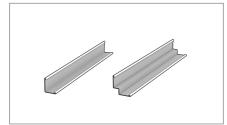






S-BESK tiles are available in Soft Fiber, which come in a standard size of 600x600 mm with a thickness of 25 mm, and installed using the Donn® T24 grid system

Main Tee, Long Cross Tee, Short Cross Tee



Perimeter Wall Angle (Shadowline Wall Angle, L Angle)

HANGING OPTIONS









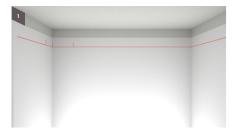
Adjustable Hanger

Suspension Wire

Angle Section

Hanging Bracket

S-BESK CONCEALED CEILING INSTALLATION

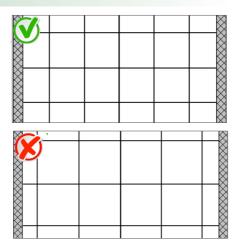


Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules towards the perimeter based on the tile size as shown in figures 4.1 & 4.2.

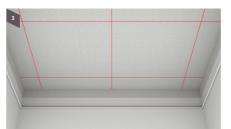


Secure the perimeter wall angle at the specified ceiling height.

Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by ½ module size to ensure this arrangement.



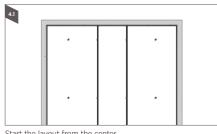
D-BESK CONCEALED CEILING INSTALLATION



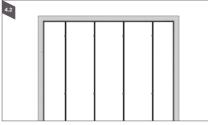
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.



Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



Start the layout from the center.



Progressing in modules towards the perimeter.



Fix the main tee at 1200 mm spacing and lay it on the wall angle. Fixing of the main tee should be higher than the

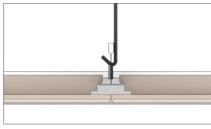




Insert the short cross tee to long tee in place.



Position the main tee higher than lower leg of the perimeter



Insert the long cross tee to main tee in place at 600 mm

S-BESK section.

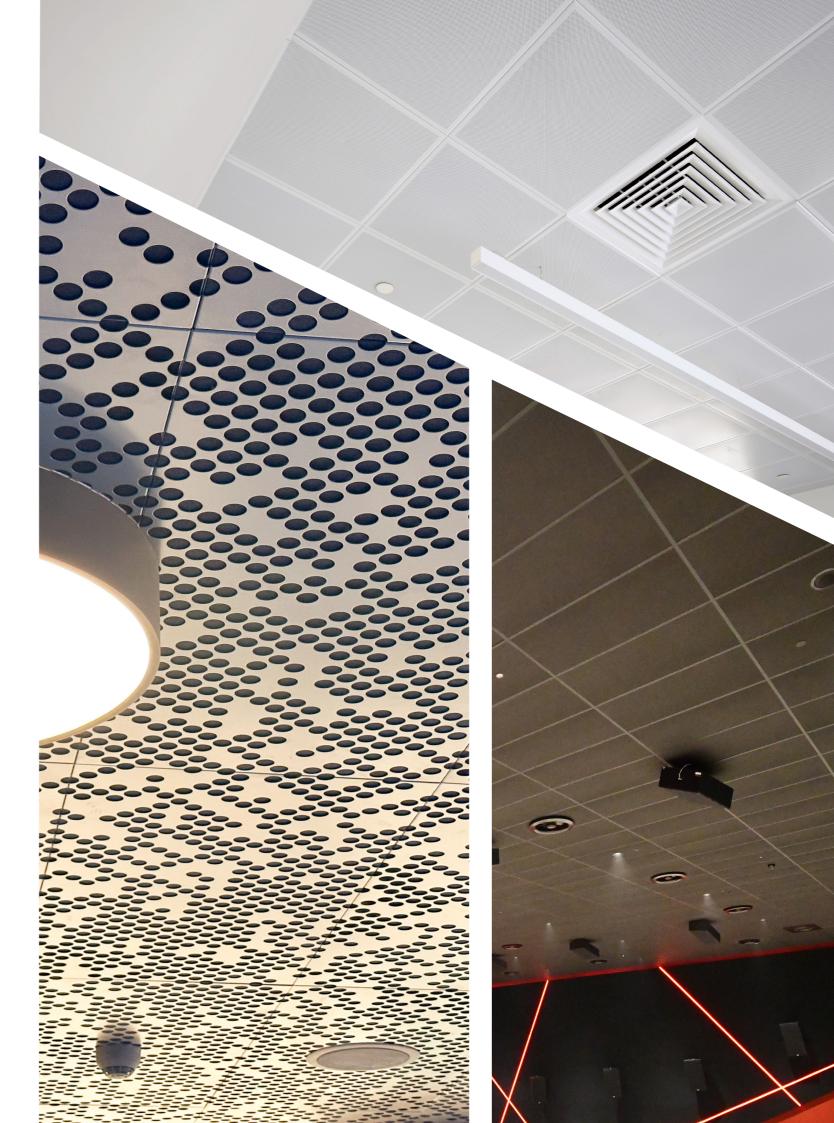
spacing.



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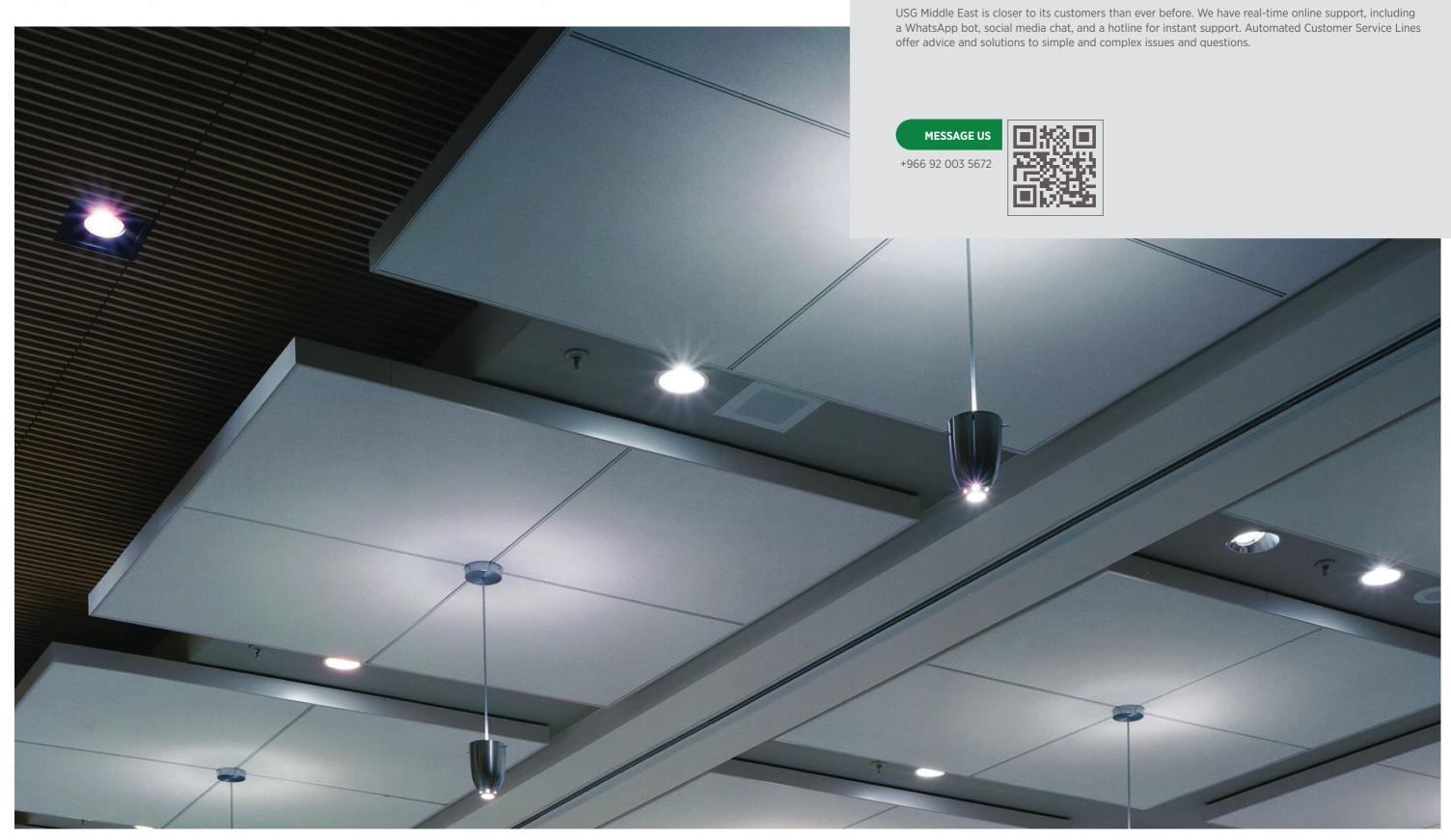
SUSPENDED CEILING GRID PACKAGING

		Total LM Per Cartoon	Total Pcs Per Cartoon	rotal LM Per Pallet	Total Cartoons Per Pallet	Weight Per Pc (Kg)	Cartoon Weight (Kg)	Pallet Weight (Kg)
Product Name	Item Code	P	P	P	₽	>	ບັ	<u>e</u>
Main Runner								
USG ME DONN® Brand Acoustical Suspension System	801DX3600H33	90.0	25	3,600	40	0.924	24.4	979
DX [®] /DXL [™] T24 Intermediate Duty 3.6m								
USG ME DONN® Brand Acoustical Suspension System	801DX3660H33	91.5	25	3,660	40	0.938	24.7	993
DX [®] /DXL [™] T24 Intermediate Duty 3.66m								
USG ME DONN® Brand Acoustical Suspension System	801DX3600H38	90.0	25	3,600	40	1.045	27.4	1,101
DX®/DXL™ T24 Heavy Duty 3.6m								
USG ME DONN® Brand Acoustical Suspension System	801DX3660H38	91.5	25	3,660	40	1.062	27.8	1,118
DX*/DXL™ T24 Heavy Duty 3.66m								
USG ME DONN® Brand Acoustical Suspension System	801DXL3600	90.0	25	3,600	40	1.255	32.7	1,311
DX*/DXL™ T24 Heavy Duty - Fire Rated 3.6m								
USG ME DONN® Brand Acoustical Suspension System	801DXL3660	91.5	25	3,660	40	1.276	33.2	1,332
DX®/DXL™ T24 Heavy Duty - Fire Rated 3.66m								
USG ME DONN® Brand Acoustical Suspension System	801DXLT15-3600	72.0	20	2,880	40	1.094	23.0	926
DX [®] /DXL [™] T15 Centricitee 3.6m								
USG ME DONN® Brand Acoustical Suspension System	801DXLT15-3660	73.2	20	2,928	40	1.112	23.4	941
DX®/DXL™ T15 Centricitee 3.66m								
Long Cross Tee								
USG ME DONN® Brand Acoustical Suspension System	803DX1200H25	90.00	75	4,320	48	0.269	20.7	1,006
DX®/DXL™ T24 Intermediate Duty 1.2m								
USG ME DONN® Brand Acoustical Suspension System	803DX1220H25	91.50	75	4,392	48	0.275	21.1	1,028
DX®/DXL™ T24 Intermediate Duty 1.22m								
USG ME DONN® Brand Acoustical Suspension System	803DX1200H38	60.00	50	2,880	48	0.349	17.9	875
DX*/DXL™ T24 Heavy Duty 1.2m								
USG ME DONN® Brand Acoustical Suspension System	803DX1220H38	61.00	50	2,928	48	0.355	18.2	890
DX®/DXL™ T24 Heavy Duty 1.22m								
USG ME DONN® Brand Acoustical Suspension System	803DXT15-1200H38	72.00	60	3,456	48	0.294	18.0	880
DX*/DXL™ T15 Centricitee 1.2m								
USG ME DONN® Brand Acoustical Suspension System	803DXT15-1220H38	73.20	60	3,514	48	0.299	18.3	895
DX*/DXL™ T15 Centricitee 1.22m								
Short Cross Tee								
USG ME DONN® Brand Acoustical Suspension System	804DX60025	45.00	75	4,320	96	0.131	10.3	1,006
DX*/DXL™ T24 Intermediate Duty 0.6m								
USG ME DONN® Brand Acoustical Suspension System	804DX610H25	45.75	75	4,392	96	0.135	10.6	1,034
DX®/DXL™ T24 Intermediate Duty 0.61m								
USG ME DONN® Brand Acoustical Suspension System	804DX600H38	30.00	50	2,880	96	0.175	9.2	901
DX®/DXL™ T24 Heavy Duty 0.6m								
USG ME DONN® Brand Acoustical Suspension System	804DX610H38	30.50	50	2,928	96	0.178	9.4	916
DX®/DXL™ T24 Heavy Duty 0.61m								
USG ME DONN® Brand Acoustical Suspension System	804DXT15-600H38	36.00	60	3,456	96	0.149	9.3	911
DX®/DXL™ T15 Centricitee 0.6m								
USG ME DONN® Brand Acoustical Suspension System	804DXT15-610H38	36.60	60	3,514	96	0.151	9.5	923
DX*/DXL™ T15 Centricitee0.61m								
Wall Angle								
Wall Angle Regular 3.6m	802MT3600	144.0	40	5,760	40	0.585	24.2	973
Wall Angle Shadowline 3.6m	802MS3600	180.0	50	4,320	24	0.765	39.5	952
Wall Angle Centricitee 3.6m	802MT15-3600	144.0	40	5,760	40	0.553	22.9	922



WARRANTY & MAINTENANCE: USG ME PRIORITIZES

CUSTOMER SATISFACTION



Ceiling Products with 30-Year Limited Warranty

Happier customers are repeat customers!

USG Middle East understands the importance of after-sales services that ensure our customers get as much

use and value as possible from our systems. Our mission of being a customer-centric company continues!

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TERMS AND CONDITIONS

DELIVERY OF MATERIALS

All materials shall be delivered in original unopened packages and stored in an enclosed shelter, protecting them from damage and exposure to the elements. Never open cartons and keep boards in standing position. This will increase the possibility of tile warpage.

STORAGE

Panels: Storage time of materials at the job site should be as short as possible. Environmental conditions should be as close as possible to those specified for occupancy (see Environmental Conditions below).

Excess humidity during storage can cause material expansion and possible warp, sag, or poor fit after installation. Chemical changes in the mat and coatings can be aggravated by excess humidity and cause discoloration during storage, even in unopened cartons. Cartons should be removed from pallets and stringers to prevent material distortion. Long-term (6-12 months) storage under uncontrolled environmental conditions should be avoided.

Suspension System: Store in a manner that will prevent warping, scratches, or damage

- · Handling: Handle in such a manner to ensure against racking, distortion, or physical damage of any kind.
- Damaged or deteriorated materials should be removed from the premises. Immediately before installation, to stabilize tile and panels, store them at a location where temperature and humidity are consistent with conditions during installation and anticipated for occupancy. In this case, refer to USG Middle East's nearest sales office within three days of receiving the material (provide signed delivery documentation).

ENVIRONMENTAL CONDITIONS

- Installation of acoustical panels shall begin once the building is enclosed, permanent heating and cooling equipment is in operation, and residual moisture from plaster, concrete, or terrazzo work has dissipated.
- Do not use ceiling panels in extreme or continuous high humidity or areas exposed directly to weather or water. Ceiling panels are sized and designed within the standard occupancy range of temperature and humidity, 15-30 °C, no more than 70% RH (relative humidity). Humidity can significantly affect product dimensional stability and sag resistance. Sag can become noticeable during periods of high humidity, lasting only a few hours. ClimaPlus™ ceilings, if used with DONN® Brand Suspension Systems, can withstand temperatures from 30-40 °C and relative humidity up to 95%-100% RH. See USG ME for specific warranty information.
- · Allow time for dimensional changes in ceiling panels stored at temperature/humidity conditions well outside those recommended for service. With increases in temperature/humidity, these products expand up to 4mm/m at 30 °C/90% RH and may not fit into a fixed grid. Conversely, these products will be undersized with decreases but expand to normal when standard ambient conditions return.
- For some pattern edge details, if perimeter panels must be cut smaller, the cut edge must be field-rabbited, or the wall angle must be lowered by 6mm-10mm (Reveal Depth).
- Formaldehyde & VOC Classification, as tested per ASTM D5116 and according to standards established by the Collaborative for High-Performance Schools (CHPS), the California Office of Environmental Health Hazard Assessment (OEHHA), and the USGBC LEED for Schools.

Products are classified as zero- or low-emitting for formaldehyde and VOC emissions as defined:

a. "Zero-Emitting"

Materials producing concentration levels below the test-chamber background level specified by the "Standard Practice for Testing Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers," including the 2004 addendum. Section 3.8.4.3 states, "Background concentrations in the empty chamber ventilated at 1.0 air changes per hour shall not exceed two µg m-3 (1.6 ppb) for any individual VOC, including formaldehyde" and all VOCs with chronic inhalation Reference Exposure Levels adopted by California EPA COEHHA for Proposition 65 chemicals.

b. "Low-Emitting"

1. Materials passing CHPS requirements as established in the «Standard Practice for Testing Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers,» including the 2004 addendum. In addition, these products produce formaldehyde concentration levels below nine µg m-3 & contribute no more than one-half of the chronic inhalation Reference Exposure Level adopted by California EPA COEHHA for all other VOCs identified by Proposition 65.

- 2. Must be tested by an independent lab per these standards, along with product submittals.
- 3. Documentation of laboratory tests must indicate product and item number if test results differ from other facility manufacturing locations for supplied products.

QUALITY ASSURANCE

- Single Source Responsibility: To obtain combined warranty for the DONN® Brand suspension system and the acoustical panel, color match or ceiling panel and suspension system compatibility, all acoustical panel and suspension system components shall be produced and supplied by one manufacturer. Materials supplied by more than one manufacturer are
- Subcontractor qualifications; Installer shall have adequate experience in the installation of suspended ceiling systems on projects similar to those specified. They must also be qualified and approved by USG Middle East's technical department.
- Requirements of regulatory agencies: Codes and regulations of authorities having jurisdiction.

Source quality control:

- Test reports: Manufacturer will provide test certification for minimum requirements in accordance with applicable industry standards and/or to meet performance standards specified by various agencies.
- Changes from system: System performance following any substitution of materials or change in assembly design must be certified by the manufacturer.

PROJECT CONDITIONS

- Existing conditions: (include specific alteration work requirements for project).
- Environmental requirements for interior installation: Building shall be enclosed with windows and exterior doors in place and glazed. Roof must be watertight before installation of ceiling system and related ceiling components. Climatic Condition Range for panels used on this project are as follows:

 1. ClimaPlus™ Ceilings: 15-30 °C with a max 99% RH. ClimaPlus™ ceilings used with DONN® Brand Suspension Systems can be used when building is not enclosed and in higher temperature and humid areas.

• Coordination with other work:

- 1. General: Coordinate with other work supported by or penetrating through the ceiling, including mechanical and electrical work and partition systems.
- 2. Mechanical work: Ductwork above ceiling shall be completed and permanent heating and cooling systems operating to climate conditions prior to installation of ceiling components.
- 3. Electrical work; Installation of conduit above ceiling shall be complete before installation of ceiling components.
- 4. Fire protection work: Fire protection lines and/or equipment occurring above ceiling shall be completed and tested before ceiling components are installed.

· Protection:

1. Personnel: Follow good safety and industrial hygiene practices during handling and installing all products and systems. Take necessary precaution and wear appropriate personal protective equipment as needed. Read material safety data sheets and related literature for important information on products before installation. Contractor to be solely responsible for all personal safety issues during and subsequent to installation; architect, specifier, owner, and manufacturer will rely on contractor's performance in such regard.

2. Protect completed work above ceiling system from damage during installation of ceiling components.

INSPECTION

- Examine areas to receive ceiling panels for conditions that will adversely affect installation. Provide written report of discrepancies.
- Do not start work until unsatisfactory conditions are corrected.
- · Work to be concealed: Verify work above ceiling is completed and installed in manner that will not affect layout and installation of ceiling panels.
- · Beginning of installation shall signify acceptance of conditions in areas to receive ceiling panels.

PREPARATION

• Field dimensions must be verified prior to installation.

INSTALLATION

- Standard reference: Install ceiling panels and suspension system, including necessary hangers, grillage, splines, and other supporting hardware, in accordance with ASTM C636, 2006 IBC (2007 CBC), CISCA Ceiling Systems Handbook, (UL Design) and any applicable code requirement.
- Manufacturer's reference: Install ceiling panels in exposed grid systems, supported on all edges, in accordance with manufacturer's warranty.
- Drawing reference: Install ceiling panels in accordance with approved shop drawings.

• Hanger Wires:

- 1. Spacing: Space hanger wires on main tees not more than 1200mm o.c., attaching hangers directly to the structure above, or as required to support loads.
- 2. Limitations: Do not support wires from mechanical and/or electrical equipment, piping or other equipment occurring above ceiling.

TERMS AND CONDITIONS

- Ceiling Perimeter: Install edge moldings (50mm minimum) and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal acoustical panel edges.
- 1. Tee ends shall be tied together with USG ME specified accessories or other approved means to prevent the tees from spreading apart.
- 2. Mechanically attach the terminal ends of the ceiling suspension members to the perimeter molding of two adjoining walls using pop-rivets or other approved means.
- 3. Maintain a 20mm clearance between the opposite ends of the suspension members and the wall. The unattached ends of the suspension members shall rest upon and be free to slide perpendicularly to the perimeter molding.
- Alternate Perimeter Attachment: When required by local code, install 22mm edge molding with ACM7 Seismic Clip.
- Accessories: Install accessories as applicable to meet project requirements.
- 1. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal acoustical tile edges.
- 2. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

• Install acoustical tiles in coordination with suspension system.

- 1. Fit adjoining tile to form flush, tight joints. Scribe and cut tile for accurate fit at borders and around penetrations through tile.
- 2. Remove and replace any damaged tiles.

• Lighting Fixtures:

- 1. All light fixtures shall be mechanically attached to the suspension system per NEC 410-16 (two per fixture unless the fixture is independently supported).
- 2. Support of rigid lay-in or can light fixtures:
- a. Each fixture less than 4.5 Kg shall have a single wire (wire may be slack) attached from the fixture to structure.
- b. Each fixture that weighs between 4.5 and 25 Kg shall have two wires (wires may be slack) attached at diagonal corners of the fixture to structure.
- c. Each fixture greater than 25 Kg shall be directly supported to structure by approved hangers.
- d. Pendant light fixtures shall be directly supported from structure with 9-gauge wire (or approved alternative).

• Air Terminals:

- 1. Air terminals less than 9 Kg shall be positively attached to the suspension system
- 2. Air terminals that weigh between 9 Kg and 25 Kg shall be mechanically attached to the suspension system. Two slack wires shall be attached from the housing to structure.
- 3. Air terminals in excess of 25kg, shall be directly supported to structure by approved hangers.
- Sprinkler heads and other penetrations shall have 10mm clearance on all sides.

CEILING PRODUCTS 30-YEAR LIMITED WARRANTY

WHAT IS COVERED?

USG Middle East warrants that the following ceiling products will be free from defects in materials and workmanship at the time of manufacture:

USG Middle East Donn® Brand and Quadra suspension systems

USG Middle East ceiling panels

USG Middle East Celebretto Specialty Ceiling range

In addition, USG ME provides the following performance warranties for these products:

- USG ME Donn® Suspension Systems are applied with a four-step coating process that outperforms in paint adhesion and corrosion resistance, as proven by industry-standard salt spray tests conducted by an independent laboratory.
- USG ME ceiling panels and tiles with ClimaPlus™ performance shall not show visible sag when installed in a USG ME Donn® Suspension System ("Sag Warranty").
- USG ME ceiling panels with ClimaPlus™ performance shall be free from the growth of mold and mildew ("Mold and Mildew Warranty").
- USG Radar™ Ceramic ceiling panels with ClimaPlus™ performance will withstand corrosive chemical fumes ("USG Radar™ Corrosive Chemical Warranty").

HOW LONG DOES COVERAGE LAST?

The warranty periods vary depending upon whether the USG ME Donn® Suspension System is used with USG ME ceiling panels, or the products are used separately. Below are the periods of coverage, which run from the date of original purchase:

Defects in Materials and Workmanship at Time of Manufacture	Panel or Tile	Suspension System
USG ME Donn® Brand Suspension System and USG ME Soft Fiber or Mineral Fiber panels with ClimaPlus™ performance, <i>when used together</i>	30 years	30 years
USG ME Donn® Brand Suspension System and USG ME Gypsum Ceiling panels or Skynest® Wood Wool panels, when used together	1 year	30 years
USG ME Donn® Brand Suspension System and Quadra Safe Ceiling Carrier alone	_	10 years
USG ME panels with <i>ClimaPlus</i> ™ performance <i>alone</i>	10 years	-
USG ME Celebretto® Specialty Ceilings and USG ME Acoustical Drywall Ceiling alone	5 years	_
Rust Warranty for USG ME Donn® Brand Suspension System	_	30 years
Sag Warranty for panels with ClimaPlus™ performance when used in a USG ME Donn® Brand Suspension System	30 years	-
Mold and Mildew Warranty for USG ME ceiling panels with ClimaPlus™ performance	30 years	-
USG Radar™ Corrosive Chemical Warranty	30 years	_

WHO IS COVERED?

This limited warranty covers the original owner of the building at the time of installation and any subsequent owner of the building during the applicable warranty period.

WHAT WILL USG ME DO?

USG ME's liability under this limited warranty shall be, at USG ME's election, to replace the nonconforming products under warranty. Replacement of nonconforming products under warranty shall constitute the sole and total obligation of USG ME. USG ME shall not be responsible for any labor charges or other installation or replacement costs or for incidental or consequential damages of any nature whatsoever.

WHAT ARE THE CONDITIONS OF THIS WARRANTY?

- All products must be installed and maintained in accordance
 with current USG ME written instructions in effect at the
 time of installation and with best industry practice, including
 the CISCA Handbook and ASTM C636, Standard Practice for
 Installation of Metal Ceiling Suspension Systems for Acoustical
 Tile and Lay-In Panels. Refer to quality assurance mentioned
 previously under USG Middle East Terms and conditions.
- The products must always be protected from vibration, direct contact with water (including condensation), exposure to chemical fumes, excessive humidity, and excessive dust or
- dirt buildup, both before and after installation. Please note that USG ME Radar Ceramic ceiling panels with ClimaPlus™ performance can withstand exposure to chemical fumes.
- The products may not be used in exterior applications unless and to the extent explicitly permitted in USG ME's written literature at the time of installation.
- The products may not be exposed to temperature or humidity conditions prior to, during, and after installation that are outside the following limitations:

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CEILING PRODUCTS 30-YEAR LIMITED WARRANTY

Product	Environmental Limitations
USG ME Radar™ Ceramic	16-40°C up to 100% RH*
ClimaPlus™ Performance Ceilings	16-40°C up to 95% RH
Standard Commercial Ceilings and Celebretto Specialty Ceilings	16-29°C up to 70% RH
USG Donn® Brand suspension system	16-40°C up to 95% RH
USG Donn® Brand AX™, ZXLA™ and the USG Drywall Suspension System	16-40°C up to 100% RH

*Please note that the Radar™ Ceramic Acoustical Ceiling Panels with ClimaPlus™ performance can withstand the referenced humidity conditions and exposure to steam so long as the product is installed with either AX™ or AXCE™ suspension systems.

For swimming pools, install only with $AX^{\mathbb{M}}$ or $AXCE^{\mathbb{M}}$ suspension systems. For outdoor soffits, canopies and parking garages, install with $AXCE^{\mathbb{M}}$ suspension system (wind uplift should be considered).

- Ceiling panels must not be used to support any material, including insulation. Where insulation must be used, it should be no heavier than the following:
- 12.7 kg/m² for USG Sheetrock® and USG ME Skyrock Gypsum Panels Lay-In Gypsum Ceiling Panels
- -1.3 kg/m^2 for all other USG ME panels
- Application of insulation should follow USG ME recommendations. Insulation must be applied perpendicular to the suspension cross tees with the suspension system supporting the weight of the insulation. Insulation is also not recommended for use in Firechief™ applications unless specified and permitted by Underwriters Laboratories, Inc. Mold or mildew growth on insulation is not covered by this warranty.
- For all ceiling tiles with ClimaPlus™ performance (excluding USG Clean Room™ which is not covered by the Mold and Mildew Warranty), the ceilings must be maintained to avoid excessive dirt or dust buildup that would provide a medium for microbial growth on these panels or tiles. Microbial protection does not extend beyond the treated surface as received from the factory, and does not protect other materials that contact the treated surface such as insulation materials.
- You must make a warranty claim within the time limits and manner described in the here after "How Do I Make A Warranty Claim?"

WHAT IS NOT COVERED?

- Damage or loss due to the failure to follow the terms and conditions of this limited warranty.
- USG Sheetrock® and USG ME Skyrock Gypsum Panels used with the USG ME Drywall Suspension System are not covered.
- Except for the Mold and Mildew Warranty on USG ME ceiling tiles and panels with ClimaPlus™
- performance, the growth of mold or bacteria is not covered by this warranty and is not the responsibility of USG ME. USG
 ME Clean Room and USG Sheetrock® and USG ME Skyrock Gypsum lay-in panels are not covered under the Mold and Mildew
 Warranty
- Damage or loss caused by fire, water, accident, or by any form of abuse except normal wear and tear.
- Damage or loss from vibrations or chemical fumes or where moisture comes in contact with the ceiling panel or tile as a result of a leaking roof, a sweating pipe, a leaking radiator, a flood, condensation on windows, other sources of condensation where dew points are reached, humidified air from the HVAC system, or any other similar causes.
- Rusting that occurs from building leaks or condensation.

Other important information about the Sag Warranty for panels and tile with ClimaPlus™

performance when used in a USG ME Donn* Suspension System: Sag resistance is measured under Standard Test Method for Strength Properties of Pre-fabricated Architectural Acoustical Tile or Lay-In Ceiling Panels (ASTM C367-05). The Test Method cautions (Section 17.3) that it "is not designed to establish the expected performance of the ceiling panels under field conditions of use, but only the sag properties for the specific temperature, humidity, exposure time and mounting conditions used in the test."

Neither this Test Method nor any other laboratory test we are aware of can predict long-term sag resistance. We do know that the higher the relative humidity and temperature, and the longer the time these conditions prevail, the more susceptible the ceiling panels are to sag. Nevertheless, USG ME has offered sag resistant ceiling panels for more than 10 years. This excellent field performance is expected because the formulations of both core and/or backing, depending on the particular panel, inherently impart sag resistance. Avoidance of extreme temperature and humidity conditions and regular cleaning will enhance sag resistance and all other performance attributes of the ceiling panels.

HOW DO I MAKE A WARRANTY CLAIM?

To make a claim under this limited warranty, you must give USG ME written notice of your warranty claim no later than 3 days from the date the claimed problem or defect was discovered or by reasonable inspection should have been discovered. In addition, no claim may be brought more than 3 days after the end of the applicable warranty period regardless of the date of discovery of the alleged problem or defect. Your written warranty claim should include a brief description of the problem, photographs if available, and any sales receipts, invoices, or other information indicating the date of purchase and installation. Please send this information to Factory Of USG Middle East LTD. Co. 7410 (Wasil), Street #23, Cross 76, 2nd Industrial City, Dammam 3426-4201, Kingdom of Saudi Arabia / marketing@usgme.com, info@usgme.com

Except to the extent expressly inconsistent with the terms of this limited warranty, USG ME's terms and conditions of sale to the direct buyer of the products, including without limitation, any arbitration provision, shall apply to all claims made by the direct buyer under this limited warranty.

WARRANTY INFORMATION

This warranty applies to products manufactured by Factory of USG Middle East that are used in the Kingdom of Saudi Arabia.

WARRANTY INFORMATION FOR PRODUCTS USED OUTSIDE OF THE KINGDOM OF SAUDI ARABIA

To the extent permitted by applicable law, any controversy, claim, or dispute arising out of or in connection with any USG ME product warranty shall be settled with finality under the Rules of Arbitration of the International Chamber of Commerce. The seat of the arbitration and the location of the arbitration shall be Saudi Arabia. All arbitrations shall be conducted in Arabic. The USG ME product warranty does not apply to USG ME products that are sold to, delivered to, or used by countries, governments, or persons in violation of KSA Trade law.

PROJECTS DETAIL

Project Details:				
Project Name:				
Address:				
Country: ————				
Products: Ceiling Panels		Grids		
Date of Installation:				
Ceiling System Contractor Details:	:			
Name:				
Address:				
Date:	Signature		Title	
Factory of USG Middle East	3			
Name:				
INGILIE.				
Date:	Signature		Title	

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CEILING PANEL MAINTENANCE GUIDE

Choosing the best ceiling for your project can make all the difference. When maintenance is necessary, certain procedures should be followed to protect the appearance and high performance of acoustical panels.

CLEANING AND MAINTENANCE

CELEBRETTO® METAL CEILING SOLUTIONS

PRODUCTS	CLEANING AND MAINTENANCE
Hook-On Corridor System - Hook On Island Hook On Intersecto Linear Track Torsion Spring Strip Ceiling Paraline Metal Baffles Crossing Baffles Quadra Cell Metal Canopies Expanded Metal Mesh ceilings Allure Geometrix Lay-In Metal Ceiling Clip-In Metal Ceiling	Panel can be cleaned easily with microfiber feather dust brush or vacuum to remove the visible dust. Use clean cloth and mild detergent and little water. Remove any obvious dirt before applying liquid cleaner. After cleaning each tile with the solution, the tile should be quickly dried with a dry and clean cloth before moving to the next tile. Do not clean with a damp sponge, and do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals.

ACOUSTICAL DRYWALL CEILING

PRODUCTS	CLEANING AND MAINTENANCE
MAC-Ensemble™	General cleaning of dust and loose dirt may be easily achieved using a soft brush or vacuum cleaner.
Monosilent	Panels can be cleaned with an art gum eraser or dampened cloth or sponge containing as little water
Skyrock Ecoblock - H11	as possible.
Skyrock Ecoblock - R6	Panels should never be soaked or immersed in water.
Skyrock Ecoblock - R12	Cleaning can also be carried out by specialist contractors using proprietary methods and chemicals. It
Skyrock Ecoblock - R8-15-20	is strongly recommended that a trial area be cleaned to ensure that there is no detrimental effect on
Skyrock Ecoblock - Q9	the ceiling panel.
Skyrock Ecoblock - Q12	

SOFT FIBER PANEL LAMINATED WITH FACTORY APPLIED PAINTED FIBERGLASS SCRIM

PRODUCTS	CLEANING AND MAINTENANCE
Halcyon™ Canopies	Panel can be cleaned easily with a soft brush or vacuum. To clean panel, use a clean, white cloth with
Tranquille	warm water or a mild detergent and wipe panel surface.
Halcyon™	Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals.
Louna™ Elite	
Louna™ Natural	
Louna™ Hi CAC	

SOFT FIBER PANEL LAMINATED WITH PREPAINTED FIBERGLASS SCRIM

PRODUCTS	CLEANING AND MAINTENANCE
Halcyon™ Black	Panel can be cleaned easily with a soft brush or vacuum. To clean panel, use HEPA vacuum filter to
Louna™ Baffle	minimize air borne dust during the cleaning process. Care must be taken while vacuuming to avoi
Louna™ Elegant	excessive pressure. Use a blotting action to minimize potential damage of surface texture on ceiling
Louna™ Hi CAC Black	and wall panels.

WOOD WOOL PANEL FINISHED WITH FACTORY APPLIED FINISH PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Skynest Wood Wool Baffles	Panel can be cleaned easily with a soft brush or vacuum. Do not use liquid cleaning solution as in may harm the wood wool fiber.
Skynest Wood Wool Canopies	Care must be taken while vacuuming to avoid excessive pressure. Use a blotting action to
Skynest Wood Wool Exposed Grid	minimize potential damage of surface texture on ceiling panels. Use HEPA vacuum filter to minimize airborne dust during the cleaning process.
Skynest Wood Wool Ceiling Direct Mounting	

MINERAL FIBER PANEL FINISHED WITH FACTORY-APPLIED WATER-BASED PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Athena Cross Fissured Auratone Designer Series Favia Favia Acoustic Olympia™ Olympia Micro™ Omni Radar™ Skylite Acoustic Taiga Taiga Perforated	Clean with a soft brush or vacuum gently. Any dusting concerns for Mineral Fiber panels caused by punched perforations can be resolved by using a microfiber feather dust brush. Be certain to clean the mineral fiber panels in one direction only. This will prevent rubbing dust into the surface of the ceiling panel. May be cleaned with a moist cloth or a sponge dampened in water containing mild soap. The cloth or sponge should contain as little soapy water solution as possible. After washing panel face, any moisture remaining should be wiped off with a dry cloth.

MINERAL FIBER PANEL LAMINATED WITH FIBERGLASS MEMBRANE AND FINISHED WITH FACTORY-APPLIED LATEX PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Sonata	Panel can be cleaned easily with a soft brush or vacuum. To clean panel, use a clean, white cloth with warm water or a mild detergent and wipe panel surface.

MINERAL FIBER PANEL LAMINATED WITH EMBOSSED VINYL-FACED MEMBRANE

PRODUCTS	CLEANING AND MAINTENANCE
Sparta	Clean with a damp sponge, mild detergent and water. Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals. May be cleaned with a moist cloth or a sponge dampened in water containing mild soap. The cloth or sponge should contain as little soapy water solution as possible. After washing panel face, any moisture remaining should be wiped off with a dry cloth.

CERAMIC BONDED MINERAL FIBER PANEL FINISHED WITH FACTORY-APPLIED WATER-BASED PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Radar™ Ceramic	Radar [™] Ceramic panels are less affected by moisture and will withstand repeated washings with mild detergents or germicidal cleaners. Clean with a soft brush or vacuum gently. Any dusting concerns for Ceramic Bonded Mineral Fiber panels caused by punched perforations can be resolved by using a microfiber feather dust brush.

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CEILING PANEL MAINTENANCE GUIDE

GYPSUM CEILING PANEL FINISHED WITH FACTORY-APPLIED WATER-BASED PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Painted	Clean with a damp sponge, mild detergent and water. Do not use acetate ammonia or highly
Soundblock - H11	concentrated chlorine, bromide or other harsh chemicals.
Soundblock - R6	
Soundblock - R8-15-20	
Soundblock - R12	
Soundblock - Q3	
Soundblock - Q9	
Soundblock - Q12	

GYPSUM CEILING PANEL LAMINATED WITH EMBOSSED VINYL-FACED MEMBRANE

PRODUCTS	CLEANING AND MAINTENANCE
Shades Soundblock - H11	Clean with a damp sponge, mild detergent and water. Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals.
Soundblock - R6 Soundblock - R8-15-20 Soundblock - R12	May be cleaned with a moist cloth or a sponge dampened in water containing mild soap. The cloth or sponge should contain as little soapy water solution as possible. After washing panel face, any moisture remaining should be wiped off with a dry cloth.
Soundblock - Q3 Soundblock - Q9	mostare remaining should be wiped on with a dry cloth.
Soundblock - Q12	

HEALTHCARE CEILINGS

PRODUCTS	CLEANING AND MAINTENANCE
Clean Room™	Remove any obvious dirt before applying liquid cleaner. Panel can be disinfected by lightly spraying
Skylite Clean	the surface and wiping with a clean white cloth. Acceptable colorless disinfectants include Hydrogen
Taiga Hygiene	peroxide, Isopropyl alcohol, quaternary ammonium or sodium hypochlorite. Do not mix cleaning solutions and follow the cleaner manufacturer's instructions. Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals. Always follow the EPA's and CDC's latest Release Guidance for Cleaning and Disinfecting ceilings panels for healthcare applications.
Halcyon™ Healthcare	
Sonata Healthcare	
Louna™ Hygiene	

SUSPENDED CEILING SYSTEM

PRODUCTS	CLEANING AND MAINTENANCE
DONN® Brand Acoustical Suspension System	Remove panel material and perform any necessary cleaning maintenance with non-solvent based commercial cleaner.
Quadra Safe Ceiling Carrier	Immediately remove any corrosive substances or chemicals that would harm painted finishes (i.e. wallpaper adhesives). Clean with a damp sponge, mild detergent and water. Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals.

PAINTING AND RETOUCHING

PANELS:

Ceiling panels may be touched-up by spraying a thinned, non-bridging vinyl-acrylic flat wall paint. However, USG ME cannot be responsible for the finished appearance or performance for the field-painted ceiling's panels. USG ME cannot guarantee that the published surface burning characteristics, fire resistance ratings, acoustical performance, dimensional stability, sag, or light reflectance performance will remain the same after repainting.

All warranties will be voided by field painting. When painting acoustical materials, the painter should be very careful not to close up the perforations or fissures in the material. It is through these openings in the surface that sound waves enter the body of the acoustical material and are absorbed. Care should be taken that these perforations are not clogged. Spray painting will result in a more uniform coating on embossed or irregular surfaces.

Field painting of vinyl-faced products is not recommended.

Please consult the USG ME Technical Department for expert advice and recommendations.

GRIDS AND SUSPENSIONS:

Touch up all minor scratches and spots, as acceptable, or replace damaged sections when touch-up is not permitted. Repainting of suspension member shall be with a high-quality solvent base enamel paint and applied as recommended by paint manufacturer.

DISCLAIMER

- Cleaning conditions and aesthetics may be impacted by additional site conditions. These instructions pertain only to the maintenance of the aesthetics and integrity of USG Middle East ceiling systems. Please consult the manufacturer's instructions and guidance regarding any cleaning product or disinfectant product for use and efficacy.
- It is recommended that only clear cleaners be used, as dyed liquids can permanently discolor the finish of the ceiling tiles.
- Cleaning is only recommended for the finished face of the board.
- The panels should never be soaked in water or other liquids, as this can have an adverse effect on board integrity.
- Use the safety recommendations for gloves and eye protection that are given by the manufacturer of the cleaner and cleaning equipment.

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