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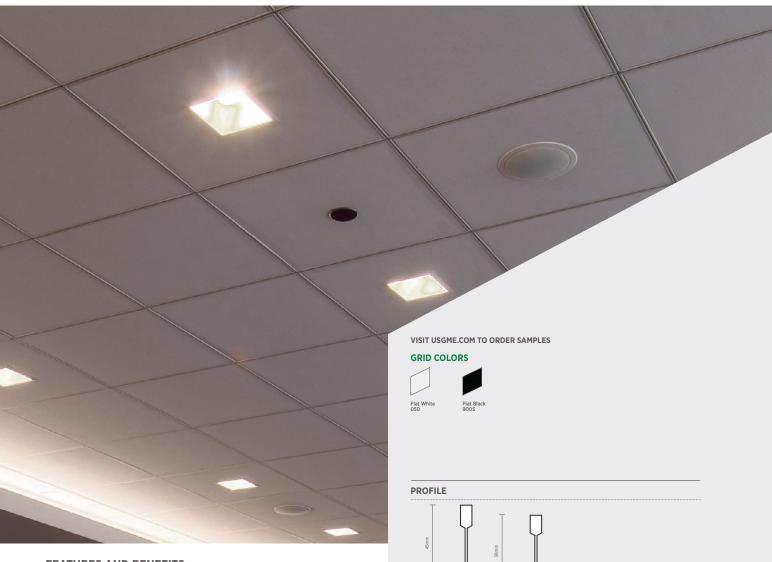
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# **USG DONN® BRAND DXF® FINELINE® SUSPENSION SYSTEM**



# **FEATURES AND BENEFITS**

- Narrow-profile, slotted grid system with 6.35mm reveal provides streamlined appearance.
- · Reveal accommodates partition attachments and pendantmounted light fixtures.
- Mitered intersections offer a clean, tailored appearance.
- Optional integrated air diffuser.
- Custom colors available.
- 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

# **EDGE DETAIL**





FINELINE BEVELED - FLB

FINELINE - FL

# **USG DONN® BRAND DXF® FINELINE® SUSPENSION SYSTEM**



# PRODUCT INFORMATION

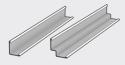
Description	Item Reference	Load*	Profile Height	Component Length
Main Runner	221DXBW01NZ	24KG/LM	45MM	3600/3660MM
	FLB3000HM	17.5KG/LM	38MM	3000MM
Long Cross Tee	221DXF003NZ	24KG/LM	45MM	1200/1220MM
	FLB1200HM-2	17.5KG/LM	38MM	1200MM
Short Cross Tee	221DXF004NZ	24KG/LM	45MM	600/610MM
	FLB600HM	17.5KG/LM	38MM	600MM
Wall Angle	802MT3600		24MM	3600MM
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9MM - 20/20MM	3600MM
U-Trim	UT123525 - UT12482	5 - UT125325	25.4/12.7MM	3000MM

<sup>\*</sup> Load of 4" hanger spacing in KG/LM and deflection limit of L/360











SUSPENSION OPTIONS

# 

# 

# Short Cross Tee 221DXF004NZ / FLB600HM



# Wall Angle 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm





# Material

Min. G30 pre-painted galvanized steel.

# Installation

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

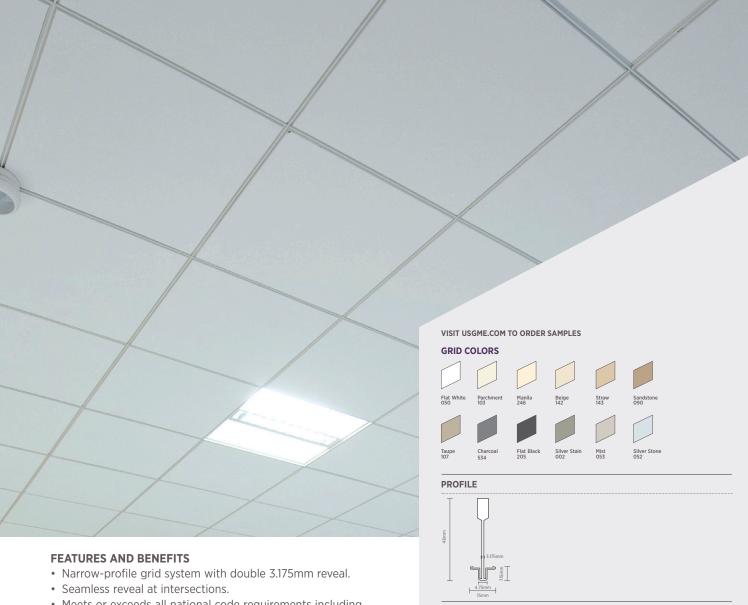
# Limitations

- For exposed grids in non-fire-rated, high-humidity applications, use USG Donn® Brand ZXLA™ painted suspension systems.
- For exterior applications, the suspension system should be reviewed by a structural engineer.

# **ASTM Load Compliance**

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

# USG DONN® BRAND DXI® IDENTITEE® SUSPENSION SYSTEM

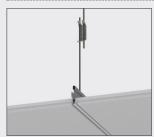


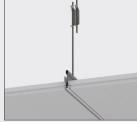
- Meets or exceeds all national code requirements including seismic.
- Compatible with USG Logix<sup>™</sup> Integrated System.
- Custom colors available.
- ICC-ES evaluated for seismic installations (ESR-1222).
- G30 hot-dipped galvanized steel body and cap inhibits red rust.
- All USG Donn® Brand Identitee® DXI™ items have High Recycled Content (HRC).
- Available in metric and imperial sizes.
- Proprietary cap lance allows a variety of 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<sup>™</sup> Integrated System

# **EDGE DETAIL**





FINELINE BEVELED - FLB

FINELINE - FL

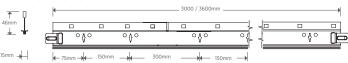
# **USG DONN® BRAND DXI® IDENTITEE® SUSPENSION SYSTEM**

# PRODUCT INFORMATION

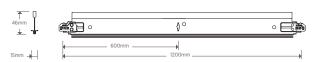
Description	Item Reference	Load*	Profile Height	Component Length
Main Runner	DXI26HRC	24KG/LM	46MM	3600/3660MM
Long Cross Tee	DXI424HRC	24KG/LM	46MM	1200/1220MM
Short Cross Tee	DXI224HRC	24KG/LM	46MM	600/610MM
Wall Angle	802MT3600		24MM	3600MM
Wall Angle Shadowline	802MS3600 - 80	802MS3600 - 802MS164L		3600MM
U-Trim	UT123525 - UT124	UT123525 - UT124825 - UT125325		3000MM

<sup>\*</sup> Load of 4" hanger spacing in KG/LM and deflection limit of L/360

# Main Runner DXI26HRC





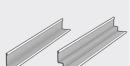


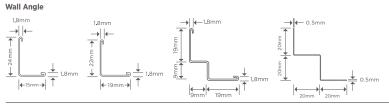
# Short Cross Tee DXI224HRC

Long Cross Tee DXI424HRC

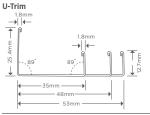












# SUSPENSION OPTIONS



# 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.

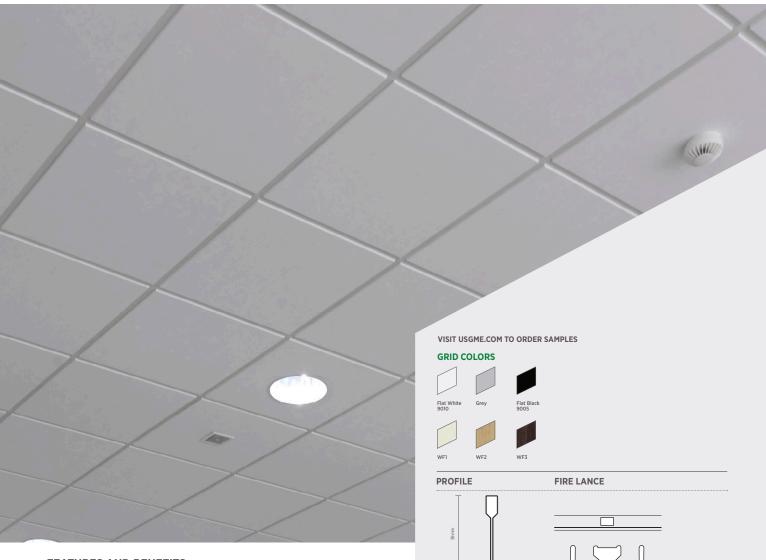
# Limitations

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

# **Optional accessories**

- Face Sleeve Seismic expansion joints.
- Intersection Sleeve for off-module intersection.

# **USG ME DONN® BRAND DX®/DXL® T24 FIRE RATED SUSPENSION SYSTEM**



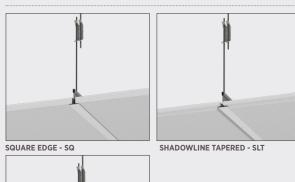
# **FEATURES AND BENEFITS**

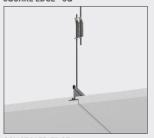
- Main tees are designed to expand at the fire lance in the event of a fire. This maintains the structural integrity of the ceiling and holds tiles in place.
- DONN® Brand DX®/DXL™ T24 Heavy Duty Fire Rated features a body and cap made of G30 hot-dip galvanized steel as per EN 10346/ASTM A653 with pre-painted 24mm width capping to ensure that the cap remains clean and rust-free.
- 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.
- Safe, fast and simple to install & easily accessible.
- · Maximum economy and design simplicity.
- Cross-tees with override-ends resist twisting and give professionally finished look with no exposed steel edges.
- Patented QUICK-RELEASE™ clip design: demountable without
- Compatible with Square, SLT, and Concealed ceiling tile edges.
- Audible Click means you know when tees are connected.
- Exceeds load compliance specifications as per ASTM C 635.
- · Available in metric and imperial sizes.

# **APPLICATIONS**

· Fire-rated interior general-use area

# EDGE DETAIL





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

# USG ME DONN® BRAND DX®/DXL® T24 FIRE RATED SUSPENSION SYSTEM



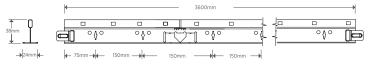


# PRODUCT INFORMATION

Description	Item Re Metric	ference  Imperial	Profile Height	Body Thickness	Component Length	Reaction To Fire*
Main Runner	801DXL3600	801DXL3660	38MM	0.38MM	3600/3660MM	Class A
Long Cross Tee	803DX1200H38	803DX1220H38	38MM	0.30MM	1200/1220MM	Class A
Short Cross Tee	804DX600H38	804DX610H38	38MM	0.30MM	600/610MM	Class A
Wall Angle	802MT3600		22MM	0.50MM	3600MM	Class A
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9MM - 20/20MM	0.50MM	3600MM	Class A
U-Trim	UT123525 - UT124	825 - UT125325	25.4/12.7MM	0.50MM	3000MM	Class A

<sup>\*</sup> As per EN 1364 : 2014 and EN 13501-1 : 2018

# Main Runner 801DXL3600



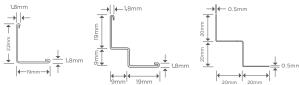
# Long Cross Tee 803DX1200H38

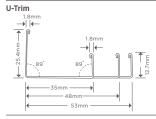


# Short Cross Tee 804DX600H38



# Wall Angle





# SUSPENSION OPTIONS



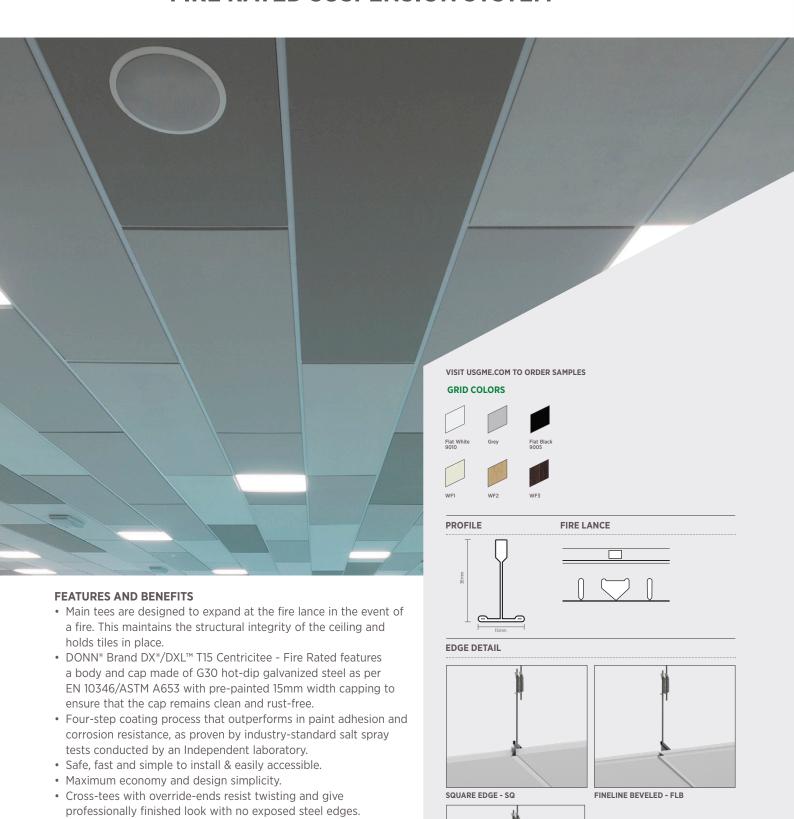
# MAXIMUM ALLOWED OF TILES WEIGHT KG PER M<sup>2\*\*</sup>

DXLH38 - T24 - Minimum Load - Carrying Capabilities of Main Runners							
Hanger distance (mm)	Applied Load (N)	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit			
900	79.45	260.5	0.339	L/360			
1200	44.68	146.5	0.339	L/360			
1500	35.75	117.2	0.339	L/360			

<sup>\*\*</sup> 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.

Please consult USG ME for layouts, load or hanger distance.

# USG ME DONN® BRAND DX®/DXL® T15 CENTRICITEE-FIRE RATED SUSPENSION SYSTEM



FINELINE - FL

# Exceeds load compliance specifications as per ASTM C 635. Available in metric and imperial sizes.

**APPLICATIONS** 

• Fire-rated interior general-use areas

• Patented QUICK-RELEASE™ clip design: demountable without

Compatible with Square, SLT, and Concealed ceiling tile edges.
Audible Click means you know when tees are connected.

Logix<sup>™</sup> Integrated Ceiling Systems

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# USG ME DONN® BRAND DX®/DXL® T15 CENTRICITEE- FIRE RATED SUSPENSION **SYSTEM**



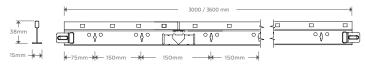


# **PRODUCT INFORMATION**

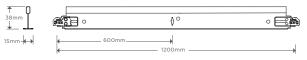
Description	Item Re Metric	ference Imperial	Profile Height	Body Thickness		Reaction To Fire*
Main Runner	801DXLT15-3600	8801DXLT15-3660	38MM	0.38MM	3600/3660MM	Class A
Long Cross Tee	803DXT15-1200H38	803DXT15-1220H38	38MM	0.30MM	1200/1220MM	Class A
Short Cross Tee	803DXT15-600H38	803DXT15-610H38	38MM	0.30MM	600/610MM	Class A
Wall Angle	802MT15-3600		24MM	0.50MM	3600MM	Class A
Wall Angle Shadowline	802MS3600 - 802M	S164L	19/9MM - 20/20MM	0.50MM	3600MM	Class A
U-Trim	UT123525 - UT12482	25 - UT125325	25.4/12.7MM	0.50MM	3000MM	Class A

<sup>\*</sup> As per EN 1364 : 2014 and EN 13501-1 : 2018

# Main Runner 801DXLT15-3600



# Long Cross Tee 803DXT15-1200H38



# Short Cross Tee 803DXT15-600H38

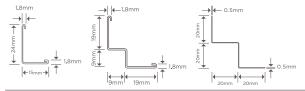
53mm

Adjustable Hanger



# Wall Angle

U-Trim



# **SUSPENSION OPTIONS**

**Angle Section** 

Hanger distance (mm)	Applied Load (N)	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit
900	72.01	236.1	0.339	L/360
1200	40.50	132.8	0.339	L/360
1500	32.40	106.2	0.339	L/360

**Hanging Bracket** 

Please consult USG ME for layouts, load or hanger distance.

Suspension Wire











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.

# USG ME DONN® BRAND DXH® 38 T24 SUSPENSION SYSTEM



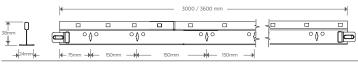
# **USG ME DONN® BRAND DXH® 38 T24 SUSPENSION SYSTEM**

# 

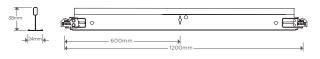
# PRODUCT INFORMATION

Description	Item Re Metric	eference  Imperial	Profile Height	Body Thickness	Component Length
Main Runner	801DX3600H38	801DX3660H38	38MM	0.30MM	3600/3660MM
Long Cross Tee	803DX1200H38	803DX1220H38	38MM	0.30MM	1200/1220MM
Short Cross Tee	804DX600H38	804DX610H38	38MM	0.30MM	600/610MM
Wall Angle	802MT3600		22MM	0.50MM	3600MM
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9MM - 20/20MM	0.50MM	3600MM
U-Trim	UT123525 - UT124825 - UT125325		25.4/12.7MM	0.50MM	3000MM

# Main Runner 801DX3600H38



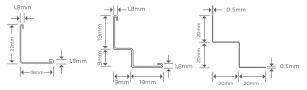
# Long Cross Tee 803DX1200H38



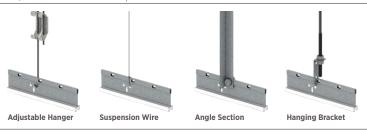
# Short Cross Tee 804DX600H38



# Wall Angle



# U-Trim 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 1.8mm 48mm 55mm



MAXIMUM ALLOWED OF TILES WEIGHT KG PER M<sup>2\*</sup>

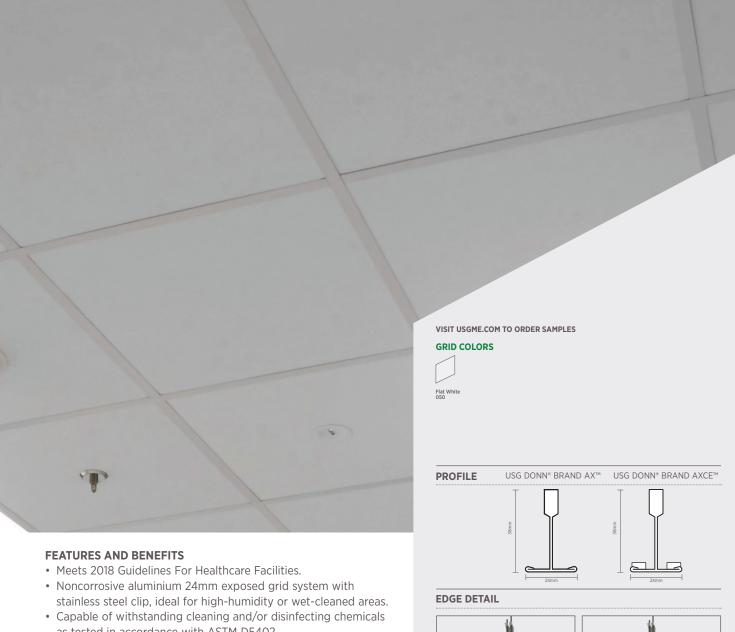
SUSPENSION OPTIONS

DXH 38 - T24 - Minimum Load - Carrying Capabilities of Main Runners							
Hanger distance (mm)	Applied Load (N)	Deflection Limit					
900	66.43	217.8	0.339	L/360			
1200	37.36	122.5	0.339	L/360			
1500	29.89	98.0	0.339	L/360			

<sup>\*</sup> 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.

Please consult USG ME for layouts, load or hanger distance.

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



- as tested in accordance with ASTM D5402.
- Tested for environmental conditions in accordance with ASTM C635.
- Aluminum components can be used in nonmagnetic environments and meet USDA/FSIS requirements.
- Cross-tee override-ends resist twisting and give a professionally finished look.
- Proprietary stainless steel Quick-Release<sup>™</sup> clip.
- Up to 90% recycled content.
- Factory applied, white closed cell foam gasket.

# **APPLICATIONS**

- Healthcare facilities, restricted and semi-restricted areas
- MRI rooms
- Magnetic-free zones
- High-humidity areas
- · Food processing areas
- Certified to meet ISO 14644-1 Class 5 (Fed. Standard 209E Class



SQUARE EDGE - SQ

**SHADOWLINE TAPERED - SLT** 

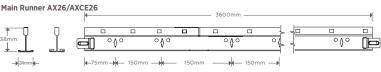
# USG DONN® BRAND AX™/AXCE™ SUSPENSION SYSTEM (ALUMINIUM)

# **PRODUCT INFORMATION**

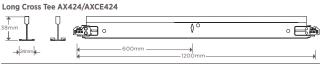
Description	Item Reference	Load*	Profile Height	Component Length
Main Runner	AX26/AXCE26	10.5KG/LM	38MM	3600/3660MM
Long Cross Tee	AX424/AXCE424		38MM	1200/1220MM
Short Cross Tee	AX224/AXCE224		38MM	600/610MM
Wall Angle	M7A/ M7ACE	M7A/ M7ACE		3600MM
U-Trim	UT123525 - UT124825 - UT125325		25.4/12.7MM	3000MM

<sup>\*</sup> Load of 4" hanger spacing in KG/LM and deflection limit of L/360





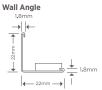




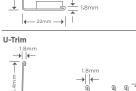




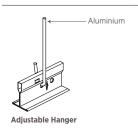








# SUSPENSION **OPTIONS**



53mm

# **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

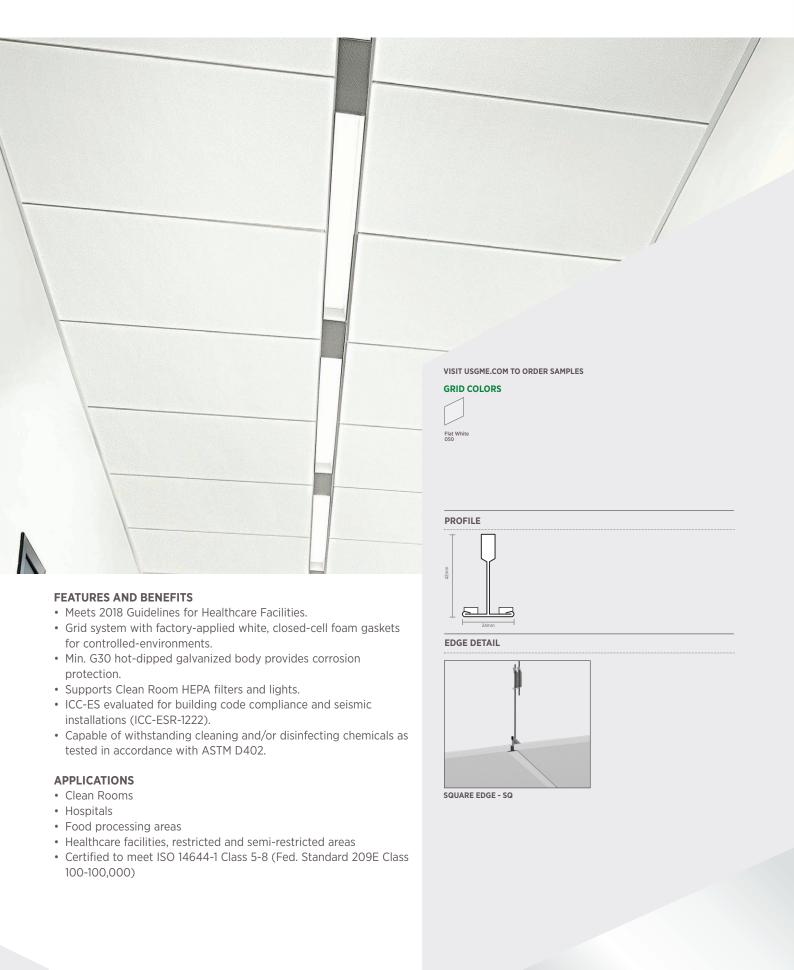
Install according to ASTM C636, ASTM E580 and USG requirements.

- 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.

# **USG DONN® BRAND CE® SUSPENSION SYSTEM**

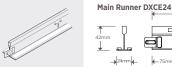


# **USG DONN® BRAND CE® SUSPENSION SYSTEM**

# PRODUCT INFORMATION

Description	Item Reference	Load *	Profile Height	Component Length
Main Runner	DXCE24	17.75KG/LM	42MM	3600/3660MM
Long Cross Tee	DXCE424		38MM	1200/1220MM
Short Cross Tee	DXCE224		38MM	600/610MM
Wall Angle	M7CE		22MM	3660MM
<u>U-Trim</u>	UT123525 - UT124825 -	UT123525 - UT124825 - UT125325		3000MM

<sup>\*</sup> Load of 4" hanger spacing in KG/LM and deflection limit of L/360



Long Cross Tee DXCE424









# SUSPENSION OPTIONS

# Short Cross Tee DXCE224 Wall Angle Lemm Lemm

# PHYSICAL DATA

# Material

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

Angle Section

Suspension Wire

# Installation

Adjustable Hanger

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.

Hanging Bracket

Hold Down Clip

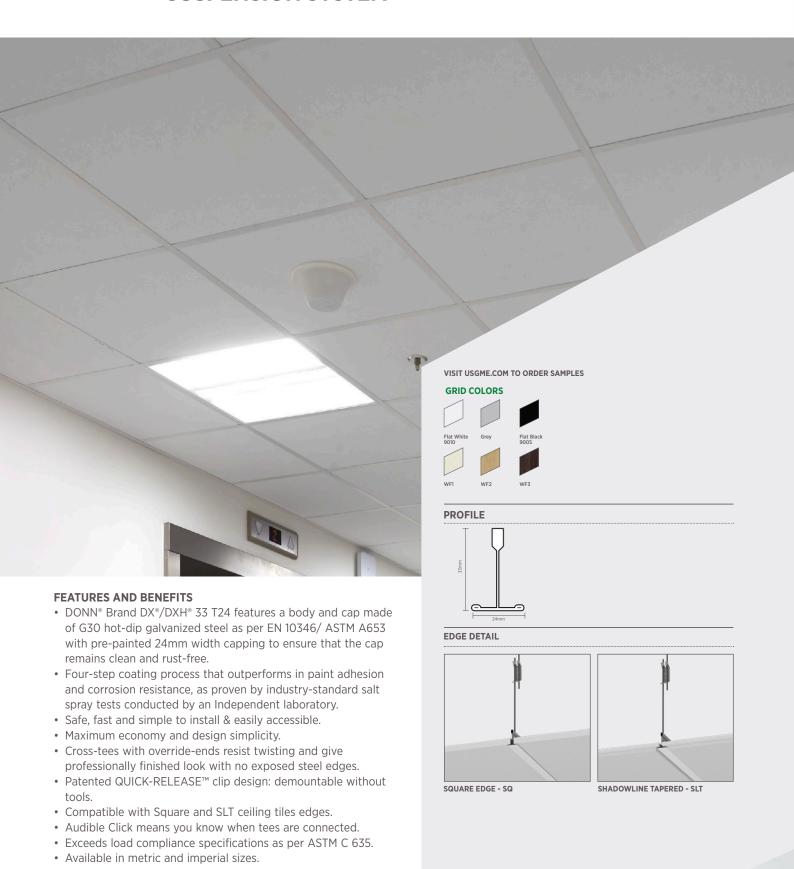
# Limitations

- 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.

# USG ME DONN® BRAND DX®/DXH® 33 T24 SUSPENSION SYSTEM



**APPLICATIONS** 

• Interior general-use areas

Logix<sup>™</sup> Integrated Ceiling Systems

# USG ME DONN® BRAND DX®/DXH® 33 T24 SUSPENSION SYSTEM



# PRODUCT INFORMATION

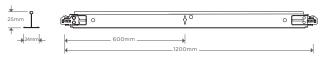
Description	Item Metric	Reference Imperial	Profile Height	Body Thickness	Component Length	Reaction To Fire*
Main Runner	801DX3600H33	DX3660H33	33MM	0.30MM	3600/3660MM	Class A
Long Cross Tee	803DX1200H25	803DX1220H25	25MM	0.30MM	1200/1220MM	Class A
Short Cross Tee	803DX600H25	803DX610H25	25MM	0.30MM	600/610MM	Class A
Wall Angle	802MT3600		22MM	0.50MM	3600MM	Class A
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9MM - 20/20MM	0.50MM	3600MM	Class A
U-Trim	UT123525 - UT12	4825 - UT125325	25.4/12.7MM	0.50MM	3000MM	Class A

<sup>\*</sup> As per EN 1364 : 2014 and EN 13501-1 : 2018

# Main Runner 801DX3600H33



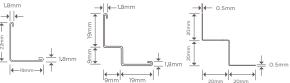
# Long Cross Tee 803DX1200H25



# Short Cross Tee 803DX600H25







# SUSPENSION OPTIONS

# U-Trim 1.8mm 1.8mm ↓ | ← ↑ | ← 1.8mm ↓ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ← ↑ | ←



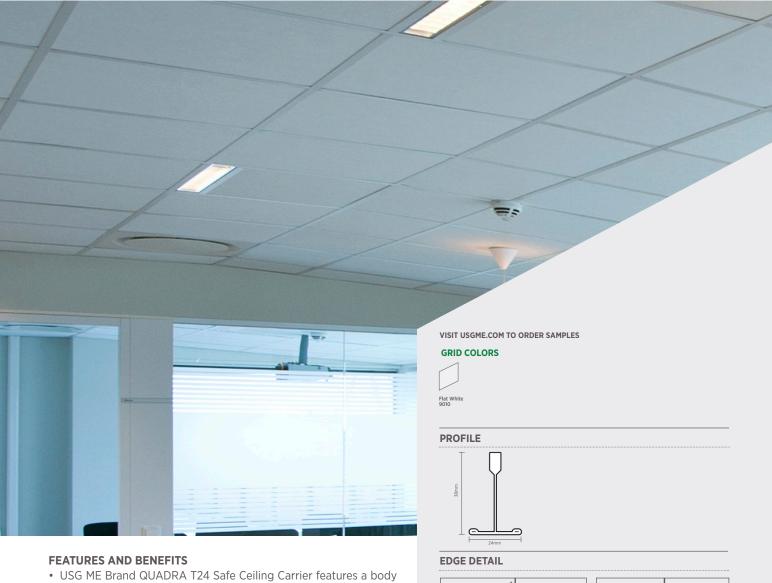
# MAXIMUM ALLOWED OF TILES WEIGHT KG PER M<sup>2\*\*</sup>

DXH 33 - T24 - Minimum Load - Carrying Capabilities of Main Runners							
Hanger distance (mm)	Applied Load (N)	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit			
900	45.90	150.5	0.339	L/360			
1200	25.82	84.7	0.339	L/360			
1500	20.65	67.7	0.339	L/360			

<sup>\*</sup> 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.

Please consult USG ME for layouts, load or hanger distance.

# USG ME BRAND QUADRA T24 SAFE CEILING CARRIER



- 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.
- 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.
- Safe, fast and simple to install & easily accessible.
- Maximum economy and design simplicity.
- Cross-tees with override-ends resist twisting and give professionally finished look with no exposed steel edges.
- · Compatible with Square, SLT ceiling tile edges.
- Exceeds load compliance specifications as per ASTM C 635.
- Tees are stitched on the web for additional load bearing capacity.
- Available in metric and imperial sizes.

# **APPLICATIONS**

• Interior general-use areas





SQUARE EDGE - SQ

SHADOWLINE TAPERED - SLT

# **USG ME BRAND QUADRA T24 SAFE CEILING CARRIER**

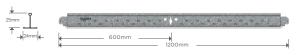


# **PRODUCT** INFORMATION

Description	Item Reference Metric   Imperial		Profile Height	Body Thickness	Component Length
Main Runner	801Q3600H38	Q3660H38	38MM	0.28MM	3600/3660MM
Long Cross Tee	803Q1200H25	Q1220H25	24.5MM	0.28MM	1200/1220MM
Short Cross Tee	804Q600H25	Q610H25	24.5MM	0.28MM	600/610MM
Wall Angle	802MT3600		22MM	0.4MM	3600MM
Wall Angle Shadowline	802MS3600 - 802MS164L		19/9MM - 20/20MM	0.4MM	3600MM
U-Trim	UT123525 - UT12482	UT123525 - UT124825 - UT125325		0.4MM	3000MM



# Long Cross Tee 803Q1200H25/Q1220H25



# Short Cross Tee 804Q600H25/Q610H25



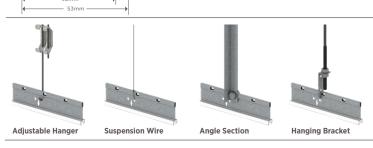
# Wall Angle

U-Trim



# **OPTIONS**

# **SUSPENSION**



# **MAXIMUM ALLOWED OF TILES WEIGHT** KG PER M<sup>2\*\*</sup>

DX QUADRA - T24 - Minimum Load - Carrying Capabilities of Main Runners					
Hanger distance (mm)	Applied Load (N)	Equivalent Uniform Load (N/M)	Allowable Midspan Deflection (mm)	Deflection Limit	
900	61.71	202.3	0.339	L/360	
1200	34.71	113.8	0.339	L/360	
1500	27.77	91.0	0.339	L/360	

<sup>\*</sup> 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.

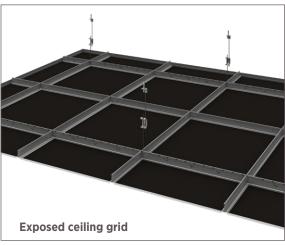
Please consult USG ME for layouts, load or hanger distance.

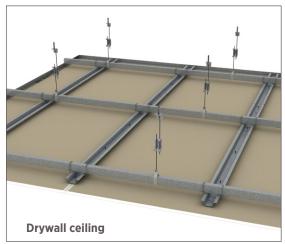
# **ROD HANGER & ADJUSTABLE BUTTERFLY CLIP**











# **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.

# MATERIALS

# **Rod Hangers:**

- Made from Galvanized Carbon Steel Wire
- Zinc Coating by Hot-Dip Process
- Wire Diameter 2.67, 3.5 and 3.75 mm
- Dynamic Load 250 N
- Length 250 mm to 3000 mm

# **Adjustable Butterfly Clip:**

- Electro Plated Zinc Coated made from 0.5 mm (Gauge 25) thick Spring Steel
- Size: 18 mm x 30 mm x 55 mm
- · Holes Diameter: 4 mm

# MECHANICAL PROPERTIES

Rod Hangers Diameter (mm)	Section Area (mm²)	Yield Strength (N/mm²)	Steel Mechanical Properties Tensil Strength (N/mm²)	Elongation (%)	Coating Weight (gms/m²)
2.67	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 M<sup>2</sup>

- Space at 1200 x 1200mm 70 Sets for 100m<sup>2</sup> exposed ceiling grid.
- Space at 1200 x 600mm 140 Sets for 100m<sup>2</sup> exposed ceiling grid.

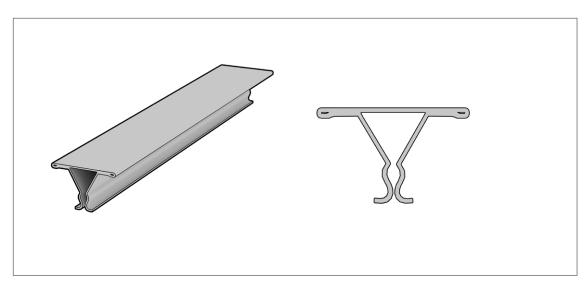
# **PACKAGING**

- 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.

# **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.

**DIMENSIONS** 

**Thickness:** 0.50, 0.55 and 0.60 mm **Length**: 3,000 mm standard

**Width:** 41.6 mm **Height:** 41.6 x 25 mm

MATERIAL PROPERTIES

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

ASTM & CODE STANDARDS

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

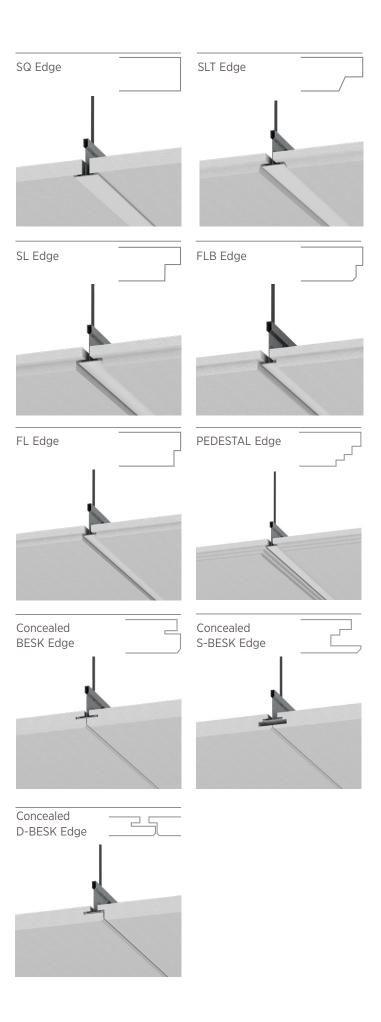
SECTION & MATERIAL PROPERTIES TABLE NOTES

							Steel Mechanical Properties				
Туре	Thickness (mm)	Spring T Cross Section Height (mm)	Spring T Depth (mm)	Section Area (mm²)	Centroid (mm)	Moment of inertia(Ixx) (mm <sup>4</sup> )	Section Modulus (Sx)(mm³)	Radius of Gyration (mm)	Yield strength N/mm²	Tensile strength N/mm²	Elongation (%)
Spring T	0.50	41.60	25	63	8.75	5,062.00	289.15	8.96	297-308	366-372	29-30
	0.55			69.3	8.76	5,524.00	315.80	8.93	297-308	366-372	30-31
	0.60			75.6	8.76	5,978.00	342.13	8.89	297-308	366-372	30-31



# CONTRACTOR OF THE PARTY AND 24

# **EDGE DETAILS**



# **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.

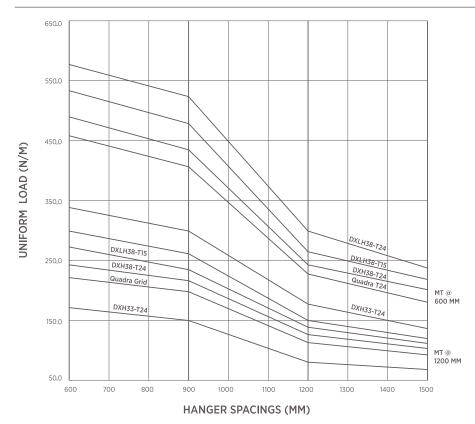
EDGE DETAIL	SQ Edge	SLT Edge	SL Edge	FLB Edge	FL Edge	Pedestal	Concealed BESK Edge	Concealed S-BESK Edge	Concealed D-BESK Edge
GRID SYSTEM									
DX*/DXL™ T24 QUADRA	1	1	1						
DX*/DXH™ 33 T24	1	1	1						
DX*/DXH™ 38 T24	1	1	1				1	T	
DX*/DXL™ T24 FIRE RATED	*	1	1						
DX*/DXL** T15 CENTRICITEE	*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

# **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**



 ${\bf Minimum\ load\ carrying\ capabilities\ of\ main\ runners\ spaced\ at\ 1200mm\ and\ 600mm\ On\ Center.}$ 

DONN® DX Main Tee	Point Load KG hanger spacing - 600mm OC	Point Load KG hanger 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 TEE**

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

# Notes

- 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.

# DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS

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.

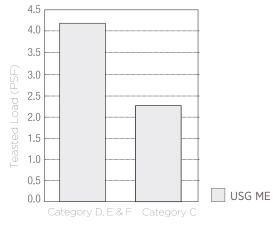
When seismic requirements are a critical design issue, architects, contractors and building officials can rely on DONN® suspension systems to:

- 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 m<sup>2</sup>. 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**



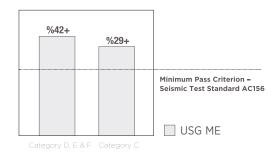
# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**

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 <sup>2</sup>	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.

# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**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	D, E, F	
Suspension System	DONN® double-web, galvanized steel meeting or hot-dipped exceeding ASTM C635	DONN® double-web, hot-dipped galvanized steel meeting or exceeding ASTM C635	
Duty rating	Heavy Duty	Heavy Duty	
Wall molding	22mm	22mm	
Seismic Clip	ACM7	ACM7	
Shake Table	Six degrees of freedom	Six degrees of freedom	
Test Protocol	Simulated earthquake	Simulated earthquake	
Qualification	AC156 and AC368	AC156 and AC368	
Result	Passed	Passed	
Minimum Acceleration Requirement	Exceeds by 42%	Exceeds by 42%	
Two Adjacent Floating Sides – With Gap	Fastener attachment to tee through slot optional), no fastener through wall molding	Fastener attachment to tee through slot optional), no fastener through wall molding	
Two Adjacent Fixed Sides – Tight, No Gap	Fastener attachment to tee (optional), one fastener through wall molding (optional)	Fastener attachment to tee (optional), one fastener through wall molding (optional)	
Perimeter Wires	Yes	Yes	
Stabilizer Bars	No	No	
System Weight	12.2kg/m²	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.

# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**

# **SYSTEMS SUMMARY**

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

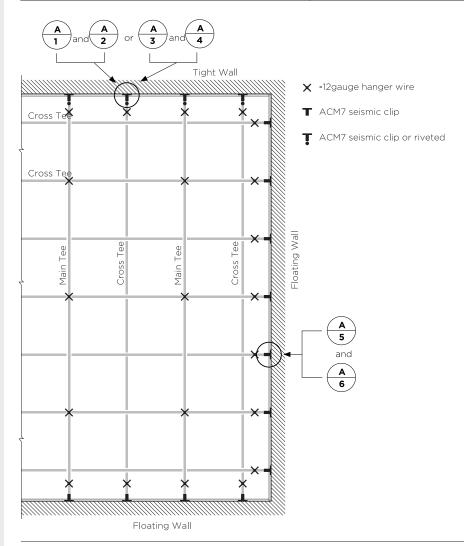
Convenience holes located in the tee bulb may be used for any and all hanger wires. Load tests performed on 12-gauge hanger wires through convenience holes found the failure to be in excess of 180kg. This far exceeds the required 90kg. The performance of DONN® seismic systems is based on the specific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

# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**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.

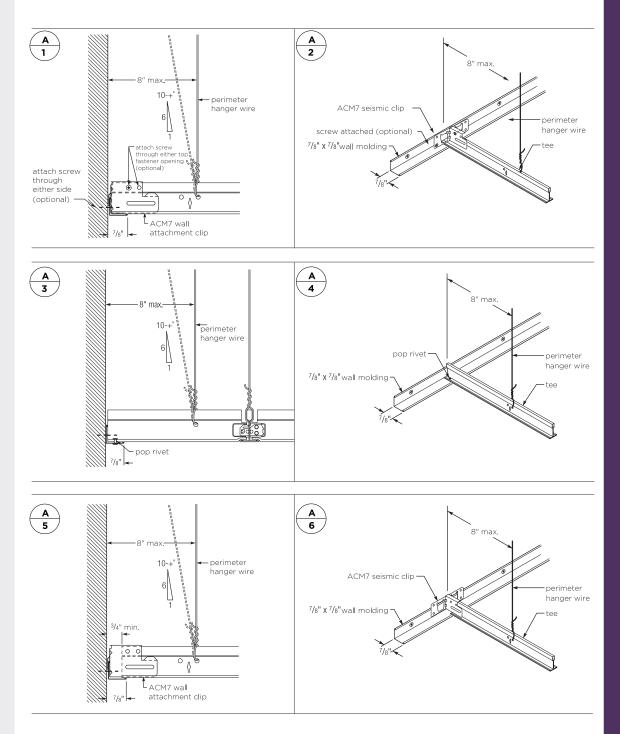
For ceiling areas exceeding (232 m²), a seismic separation joint may be required. See SC2496 for information on seismic separation joints.

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.

# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**

# ACM7 CLIP, TIGHT WALL

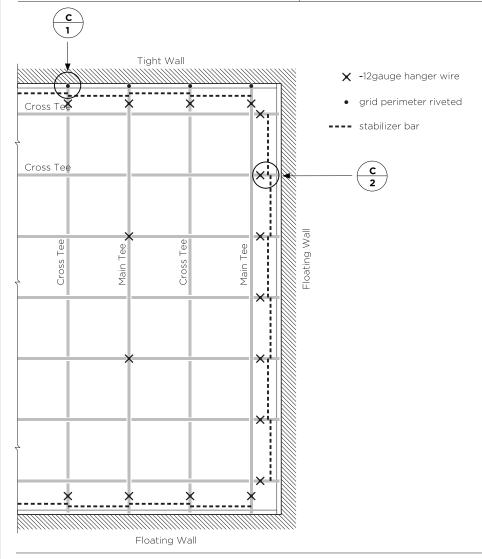


# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**Categories D, E, and F Category C as per IBC

# **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.

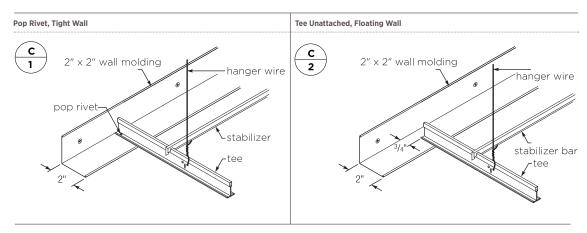
For ceiling areas exceeding 232 m², a seismic separation joint may be required. See SC2496 for information on seismic separation joints.

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.

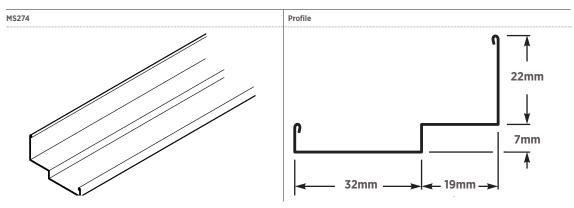
# **DONN® SUSPENSION SYSTEM SEISMIC SOLUTIONS**

# ACM7 CLIP, TIGHT WALL

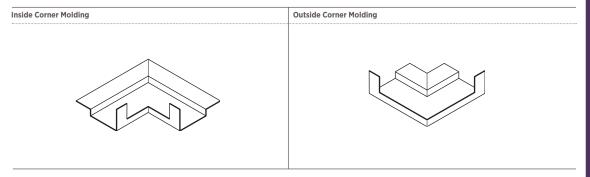


# 5MM SEISMIC SHADOW MOLDING

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.



Preformed corners are available, eliminating the need to miter this molding.



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

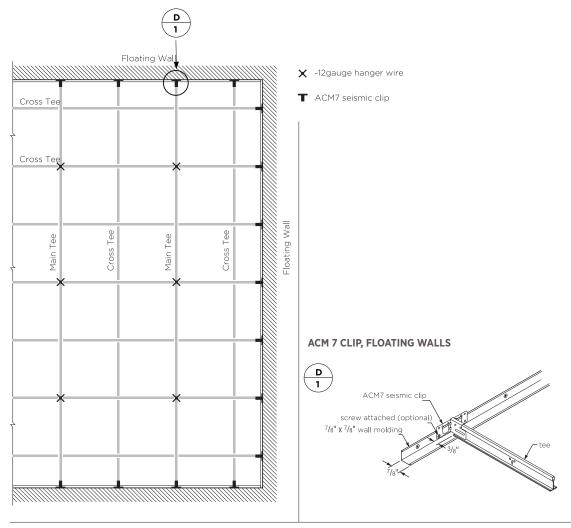
# CATEGORY C ALTERNATE SEISMIC APPLICATION

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.

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

Alternate Seismic Application

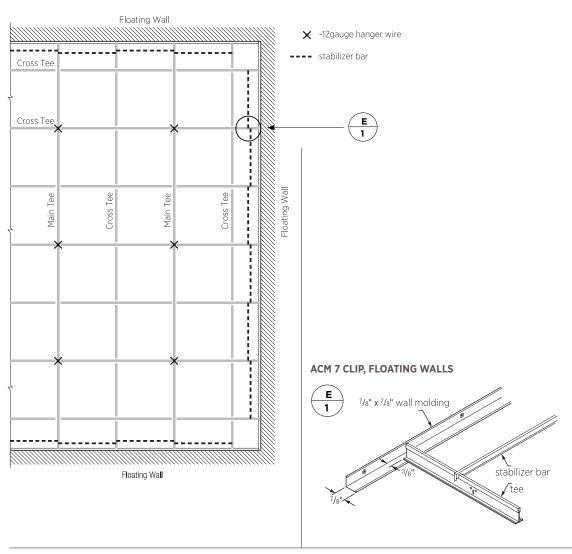
# CATEGORY C STANDARD SEISMIC APPLICATION

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







# INSTALLING DONN® BRAND ACOUSTICAL SUSPENSION SYSTEM

The original and most widely used acoustical suspension system.

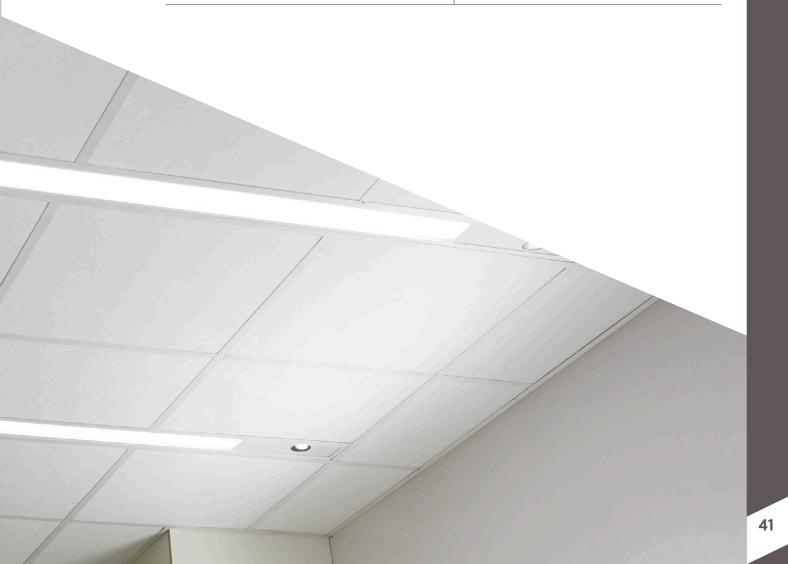
# **CONFIDENCE WITH A CLICK**

CHOOSING THE BEST CEILING FOR YOUR PROJECT CAN MAKE ALL THE DIFFERENCE.

For over 50 years, USG ME Donn® Brand has led the industry with innovations that make suspension systems easier, faster, and more reliable to install.

With an unparalleled variety of choices, no matter what your ceiling needs, we have you covered.

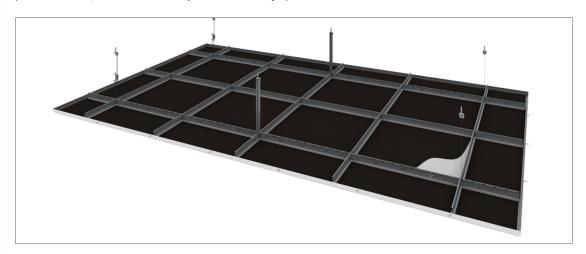
1. PRODUCTIVITY	Tight, reliable connections with low insertion force are the hallmark of USG ME Donn® Brand Acoustical Suspension Systems. The main tee and cross tee clips are removable without tools— making layout changes quicker—and The Donn Click™ audible cross tee sound lets you know when the tee is engaged. Precise dimensional tolerances prevent the modules from distorting and help keep the system square. All of this adds up to easier and faster installation.
2. FULL PRODUCT PORTFOLIO	USG Middle East offers a full line of ceilings suspension system styles and functionality. With nice different profiles to choose from, USG ME has the look design professionals want. USG Donn* is the global most recognized ceilings suspension system. USG ME Logix <sup>™</sup> systems are-designed for layouts that integrate modern, linear lighting designs.
3. CODE COMPLIANCE	All USG ME Donn® Brand Acoustical Suspension Systems have been thoroughly tested and comply with all industrial related international standards and Saudi building code jurisdictions, including seismic category C, and D-F. our Donn® Brand Acoustical Suspension Systems are exceeds load compliance specifications as per ASTM C 635.
4. CUSTOM OPTIONS	USG offers suspension systems in different colors, including widen finish. USG ME also has the ability to create suspension system components for custom installations with nonstandard module sizes.

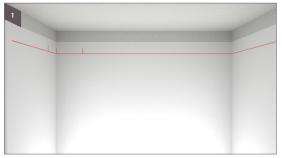


# INSTALLING DONN® BRAND ACOUSTICAL SUSPENSION SYSTEM, LAY-IN

LAY-IN

The appearance of a suspended acoustical ceiling is dependent both 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 requirements, assuring proper level and secure attachment as prescribed. Good construction conditions are very important when successfully installing a suspended ceiling. It is recommended that the temperature and humidity range be 14 - 25°C and max. 75% relative humidity. Store materials in a protected area, store tiles on the job at least 3 days prior to installation.

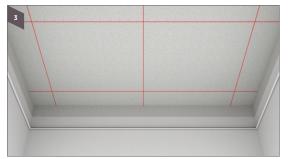




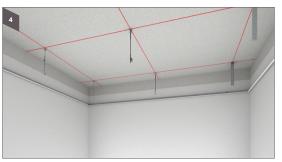
Use a laser beam to measure and plan the ceiling layout in advance so that the tiles adjacent to the walls are not less than 300mm width



Install wall angles around the perimeter at marked locations using screws at 450 mm o.c



Mark with laser the hanger spacing at 1200 mm o.c.



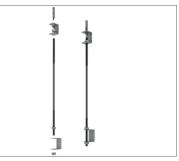
Fix hangers at 1200 mm o.c in a gradient scheme above the lines of wall angle



Use the specified hanging system (Adjustable hanger)



Use the specified hanging system (Primary Channel hanger)



Use the specified hanging system (Threaded rod)

# LAY-IN



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



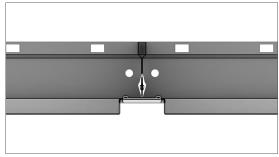
Insert the long cross tee to main tee in place for  $600 \text{x} 600 \,$  module



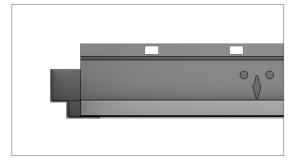
Insert the long cross tee to main tee in place for 600x600 module (Angle View)



Insert the short cross tee to long tee in place



DONN® brand audible click



Lay-In-Wall Section Detail

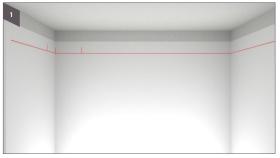


# INSTALLING DONN® BRAND ACOUSTICAL SUSPENSION SYSTEM, CLIP-IN

CLIP-IN

The appearance of a suspended acoustical ceiling is dependent both 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. Good construction conditions are very important when successfully installing a suspended ceiling. It is recommended that the temperature and humidity range be 14 - 25°C and max. 75% relative humidity. Store materials in a protected area, store tiles on the job at least 3 days prior to installation.

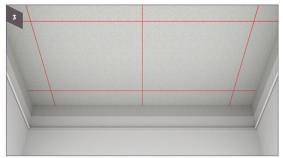




Use a laser beam to measure and plan the ceiling installation process where the min distance of Spring tee shall be 300 mm and shall not exceed 450 mm from wall



Install wall angles around the perimeter at marked locations using screws at 450 mm o.c



Mark with laser the hanger spacing at 1200 mm o.c.



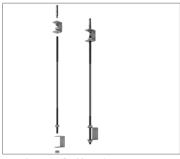
Fix hangers at 1200 mm o.c in a gradient scheme above the lines of primary channels  $\,$ 



Use the specified hanging system (Adjustable hanger)



Use the specified hanging system (Primary Channel hanger)



Use the specified hanging system (Threaded rod)

# **CLIP-IN**



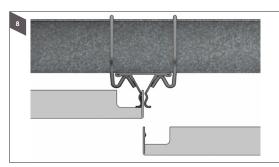
Fix the primary channel at 1200 mm spacing



Hang the wire connecting clip WCC to the primary channel  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right)$ 



Connect the spring tee to the primary channel at 600 spacing Insert the clip in panel to the exposed spring tee using wire connecting clip WCC





Spring Tee



Primary Channel

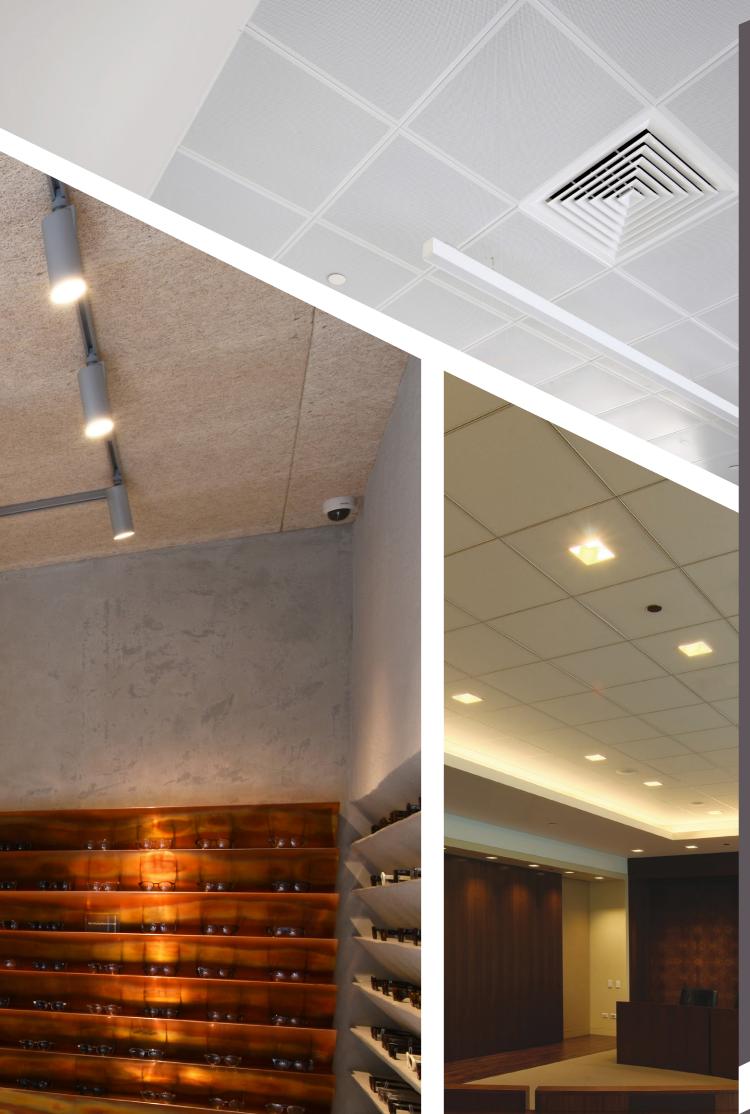


# Important Tips:

- 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.

# SUSPENDED CEILING GRID PACKAGING

3031 ENDED CEIEING GI	TID I ACIT							
Product Name	Item Code	Total LM Per Cartoon	Total Pcs Per Cartoon	Total LM Per Pallet	Total Cartoons Per Pallet	Weight Per Pc (Kg)	Cartoon Weight (Kg)	Pallet Weight (Kg)
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	0045700025	45.00	75	4.720	0.0	0.171	10.7	1000
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	00.45.76101105	45.75		4 700		0 175	10.6	1074
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	00.45\/00.01170	70.00		2 000	00	0.175	0.0	001
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	00.45.701.170	70.50		2.020	00	0.170	0.4	010
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	00 4DVT1F C001170	70.00		7.450	00	0140	0.7	011
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	00 4DVT15 C10U70	70.00	1	7 514	00	0.151	105	027
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 Degular 7.6m	902MT7C00	1440	10	E 700	40	0.505	24.2	077
Wall Angle Shadayline 7.6m	802MT3600	144.0	40	5,760	40	0.585	24.2	973
Wall Angle Contricitor 7 5m	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 AND MAINTENANCE

# **Ceiling Products with 30-Year Limited Warranty**

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! Happier customers are repeat customers!

USG Middle East is closer to its customers than ever before. We have real-time online support, including a WhatsApp bot, social media chat, and a hotline for instant support. Automated Customer Service Lines offer advice and solutions to both simple and complex issues and questions.



# **TERMS & CONDITIONS**

# DELIVERY OF MATERIALS

All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection 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 expansion of material and possible warp, sag, or poor fit after installation. Chemical changes in the mat and/or 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 distortion of material. Long-term (6- 12 months) storage under uncontrolled environmental conditions should be avoided.

Suspension System: Store in manner that will prevent warping, scratches, or damage of any kind.

- Handling: Handle in such 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 not begin until 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 for use within the standard occupancy range of temperature and humidity, 15-30 °C, no more than 70% RH (relative humidity). Humidity can greatly 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 of 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, with decreases,
  these products will be undersize, 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 the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers," including 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 2  $\mu$ g 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 the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers,» including 2004 addendum. In addition, these products produce formaldehyde concentration levels below 9  $\mu$ g 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 independent lab per these standards along with product submittals.
- 3. Documentation of laboratory test must indicate product and item number if test results differ from other facility manufacturing location for supplied products.

# **TERMS & CONDITIONS**

### 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 not acceptable.
- 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. a maximum of 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 & 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<sup>™</sup> 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:

### **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  $AX^{\text{\tiny{M}}}$  or  $AXCE^{\text{\tiny{M}}}$  suspension systems. For outdoor soffits, canopies and parking garages, install with  $AXCE^{\text{\tiny{M}}}$  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 $^{\rm 8}$  and USG ME Skyrock Gypsum Panels Lay-In Gypsum Ceiling Panels
- 1.3 kg/m<sup>2</sup> 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 Firecode® 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.

# **CEILING PRODUCTS 30-YEAR LIMITED WARRANTY**

# 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 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		
Name:		
Date	Signaturo	Titlo

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

# 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,
Tranquille	use a clean, white cloth with warm water or a mild detergent and wipe
Halcyon™	panel surface.
Louna™ Elite	Do not use acetate ammonia or highly concentrated chlorine, bromide or other harsh chemicals.
Louna™ Natural	other harsh chemicals.
Louna™ Hi CAC	

# SOFT FIBER PANEL LAMINATED WITH PREPAINTED FIBERGLASS SCRIM

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

# **CEILING PANEL MAINTENANCE GUIDE**

# 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 it 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 minimize potential damage of surface texture on ceiling
Skynest Wood Wool Exposed Grid	panels. Use HEPA vacuum filter to minimize airborne dust during the cleaning process.
Skynest Wood Wool Ceiling Direct Mounting	cleaning process.

# 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.

# **USG MIDDLE EAST CEILING PANEL MAINTENANCE GUIDE**

# CAST MINERAL FIBER WITH FACTORY APPLIED FINISH PAINT

PRODUCTS	CLEANING AND MAINTENANCE
Glacier™	Clean with a soft brush or vacuum gently. Any dusting concerns for Cast Mineral Fiber panels caused by punched perforations can be resolved by using a microfiber feather dust brush.
Sandrift™	Care must be taken while vacuuming to avoid excessive pressure. Use a blotting action to minimize potential damage of surface texture on ceiling panels.

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

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

# GYPSUM CEILING PANEL LAMINATED WITH EMBOSSED VINYL-FACED MEMBRANE

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

# **HEALTHCARE CEILINGS**

PRODUCTS	CLEANING AND MAINTENANCE
Clean Room™ Skylite Clean Taiga Hygiene Halcyon™ Healthcare Sonata Healthcare Louna™ Hygiene	Remove any obvious dirt before applying liquid cleaner. Panel can be disinfected by lightly spraying the surface and wiping with a clean white cloth. Acceptable colorless disinfectants include Hydrogen 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.

# 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.

### **CEILING PANEL MAINTENANCE GUIDE**

# 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.

# **NOTES**

# **NOTES**



