USG DONN® BRAND DX®/DXL™ CONCEALED ACOUSTICAL SUSPENSION SYSTEM
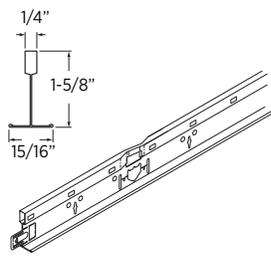
INSTALLATION GUIDE

FEATURES AND BENEFITS

- Supporting grid is completely concealed, providing a monolithic, uninterrupted ceiling plane with up to 50% access to the plenum.
- Fire-rated assemblies up to three hours.
- Min. G30 hot-dipped galvanized steel body.
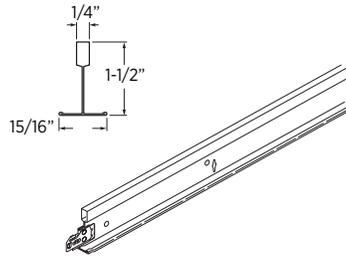- UL fire-rated assemblies available.

APPLICATIONS

- Interior general-use areas
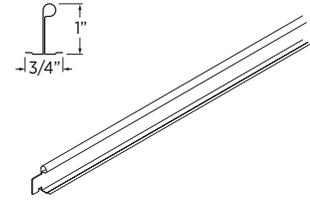- Fire-rated interior general-use areas
- Retail stores

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COMPONENTS

**NON-ACCESSIBLE GRID
COMPONENTS**

DX/DXL24 Main Tee (12 ft.)

1/4"
1-5/8"
15/16"

DX/DXL424 Cross Tee (4 ft.)

1/4"
1-1/2"
15/16"

DE416 Tee Spline (4 ft.)

1"
3/4"
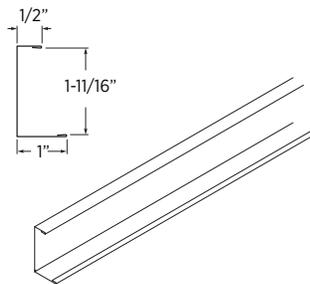
US28 Wall Molding (10 ft.)

1/2"
1-11/16"
1"
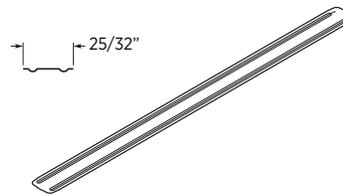
E10 Flat Spline (11 in.)

25/32"

C8 Spring Clip

4-1/2"
1-3/8"
1-5/8"
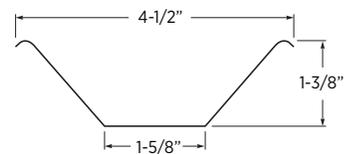
**ACCESSIBLE GRID
COMPONENTS**
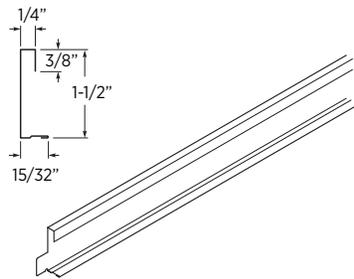
BPA424 Access Spline (4 ft.)

1/4"
3/8"
1-1/2"
15/32"

BPC116 Closing Spline (11 in.)

9/32"
1"
15/32"
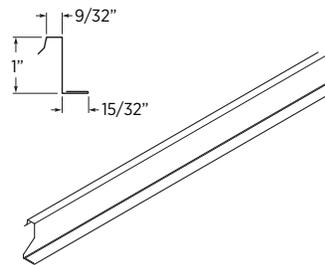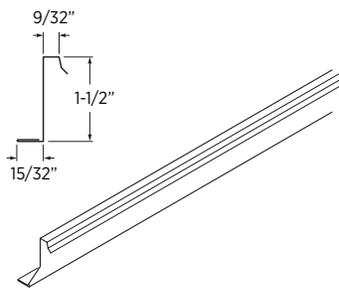
BPC234 Closing Spline (23 in.)

9/32"
1-1/2"
15/32"
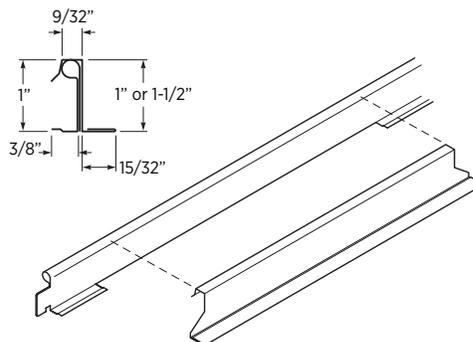
**DEN416 Notched Tee Spline (4 ft.)
with BPC116 Closing Spline (11 in.)**

9/32"
1"
1" or 1-1/2"
3/8"
15/32"

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SUSPENSION SYSTEM LAYOUT

Legend

▬	DX/DXL24 Main Tee
▬	DX/DXL424 Cross Tee
▬	DE416 TEE Spline
▬	DEN416 Tee Spline
▬	E10 Flat Spline
▬	U28CE Wall Molding
▬	BPA24 Access Spline
▬	BPC234 Closing Spline
▬	BPC116 Closing Spline

Section Details Key

1. Main Tee
2. Cross Tee
3. DE416 Tee Spline
4. Flat Spline
5. Perimeter Detail
6. Single Leaf Access
7. Bi-Parting Access
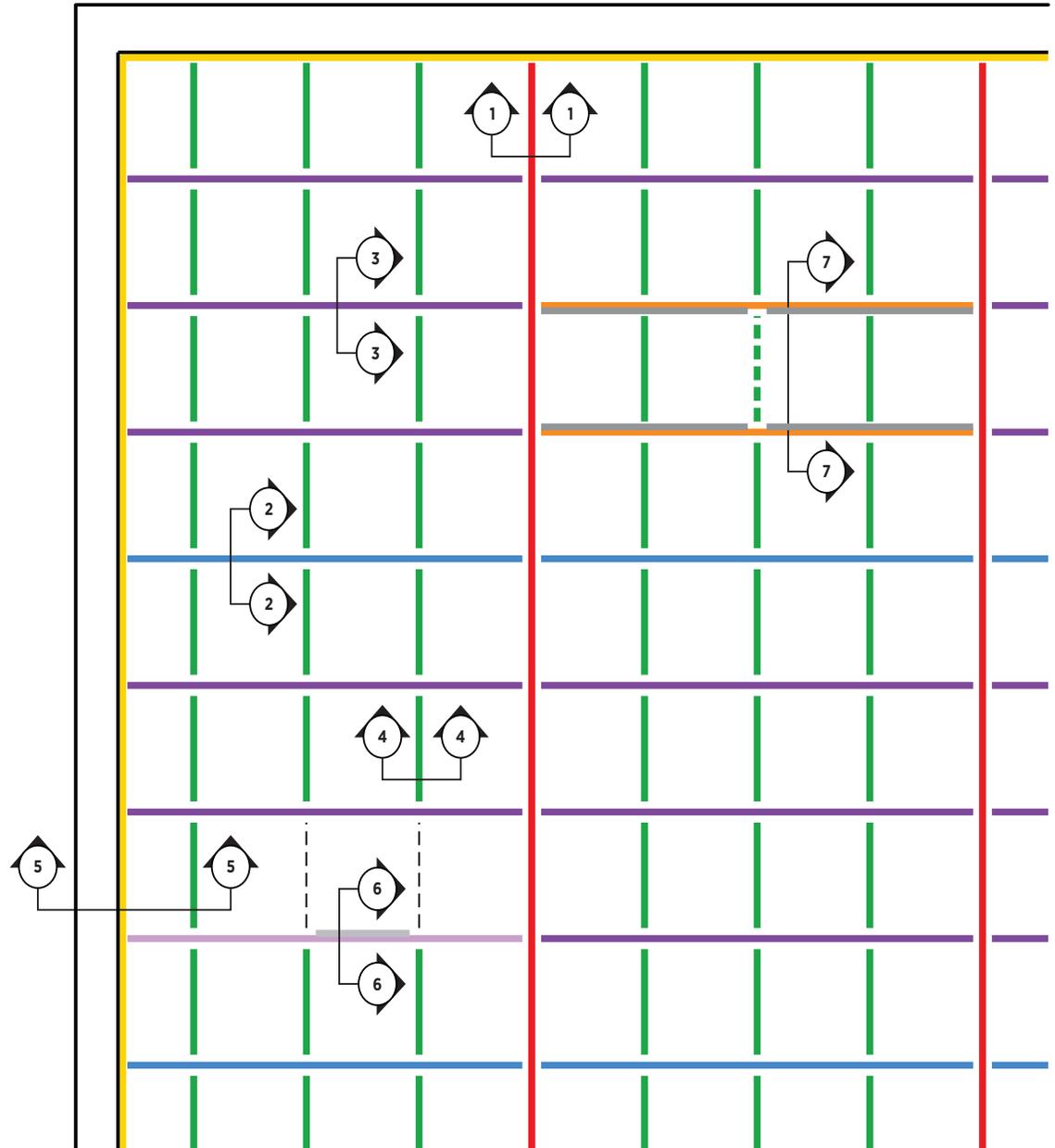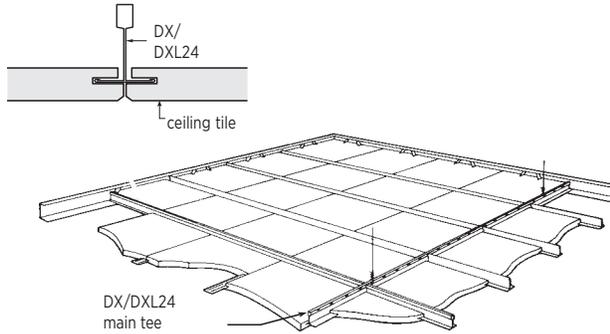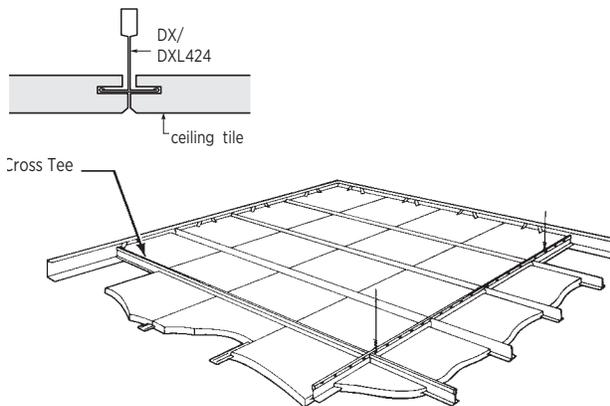
INSTALLATION

INITIAL GRID SETUP

DX/DXL24

ceiling tile

DX/DXL24 main tee

- Install the US28 wall molding at the finished ceiling height
- Calculate border tile sizes as normal for any 12″x12″ tile installation
- Bend hanger wire so that the bottom of the DX/DXL24 Main Tee hangs at 7/16″ above the bottom of the wall molding
- Install the DX/DXL24 Main Tees at 4′ on Center

DX/DXL424

ceiling tile

Cross Tee

- Install the DX/DXL424 4′ Cross Tees at 4′ on center to create a 4′x4′ opening

NON-ACCESSIBLE INSTALLATION SETUP

DX/DXL24

ceiling tile

DX/DXL424

ceiling tile
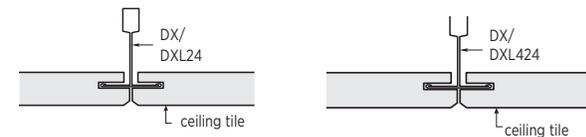
- Begin installation with a full module near a corner of the room
- Each module will have 4 rows of 4 tiles
- Install the first tile at the intersection of the Main and Cross Tee
- The tile so the grid flanges fit into the kerf of the tile

E10 flat spline

ceiling tile
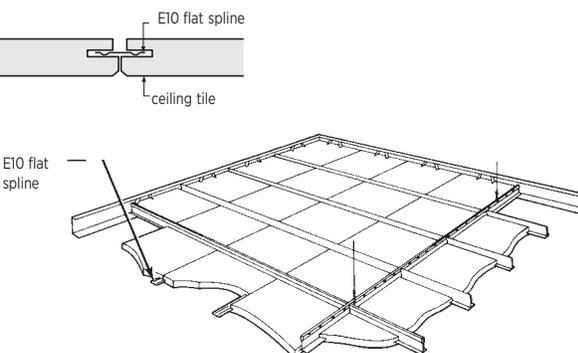
E10 flat spline

- Install an E10 Flat Spline into the first tile and then install the second tile by engaging the cross tee and the spline from the first tile
- Install tiles 3 and 4 the same way

INSTALLATION

NON-ACCESSIBLE INSTALLATION SETUP

DE416 tee spline

ceiling tile
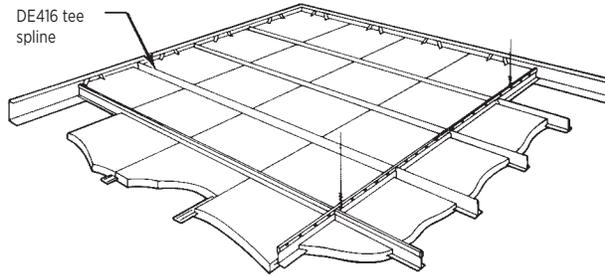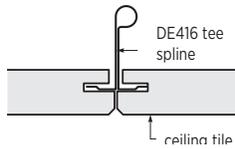
DE416 tee spline

- Finish the row by installing the DE416 Tee spline

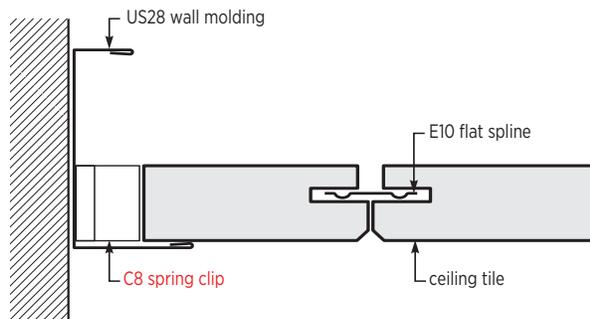- Install the second and third rows like the first

- Install the fourth row by fitting the kerf of the first tile on the flange of the DE416 tee spline in the center of the module

- Bow the middle of the DX424 Cross Tee away from the tile and fit the kerf of the tile on the Cross Tee

- Slide the tile to one side and fit the flange of the main on the kerf of the tile

- Install the next tile the same way but slide the tile to the other side

- Install an E10 Flat Spline into the kerf of one of the tiles and install the third tile. Do not install another E10 Spline yet

- Fit the fourth tile into place and then slide the E10 Splines into the tile under the flange of the Cross Tee

BORDER MODULE INSTALLATION

US28 wall molding

E10 flat spline

C8 spring clip

ceiling tile

US28 wall molding

C8 spring clip
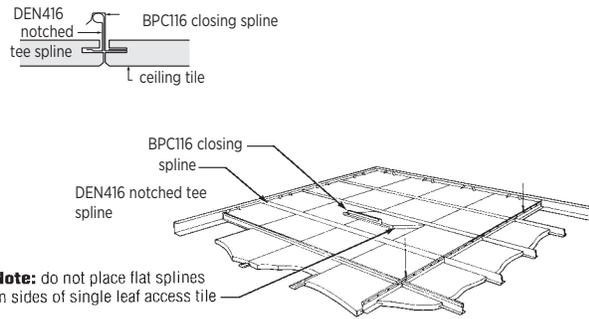
E10 flat spline

C8 spring clip

ceiling tile

- Cut each border tile 1/2″ short

- Install a C8 Wall Spring Clip on the Wall Molding with the legs against the molding

- Work from the Main Tee and Cross Tee toward the wall in the same manner as before

- The border row will be treated like the final row of a standard module

- Push the cut edge of the tile against the C8 Spring Clip until the kerf of the tile fits into the DE416 Spline, Main Tee, or Cross Tee on the opposite side

- Cut an E10 Spline to length and insert into tile. For this module, install all of the E10 Splines
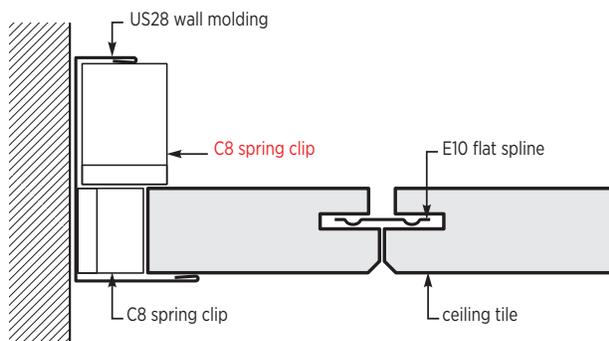
- When Installing the last tile, cut away the kerf on both sides of the tile to allow for clearance of the E10 splines that are already installed

- Install C8 Spring Clip on the top of the border tiles to create downward pressure on the tile

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INSTALLATION

SINGLE TILE ACCESS

DEN416 notched tee spline
BPC116 closing spline
ceiling tile

BPC116 closing spline
DEN416 notched tee spline

Note: do not place flat splines in sides of single leaf access tile

- Replace one of the center DE416 tee splines with a DEN416 notched tee spline
- Install tile 1, 2, and 3 in the same manner as the final row of a module. Do not install the 4th tile
- Install the DE416 tee spline into the 3 tiles
- Install the BPC116 closing spline into the kerf of the tile

- Install the 4th tile by inserting th ker of the tile onto the DE416 spline and then setting the tile into place

UPWARD BI-PARTING ACCESS

BPC234 closing spline
BPA424 access spline
ceiling tile

BPC closing spline
BPA access spline
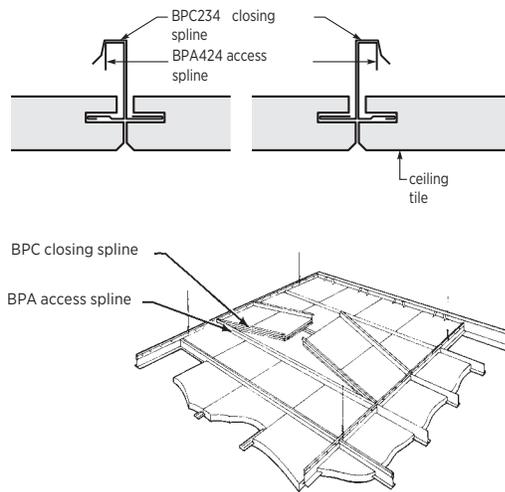
- Replace both DE416 tees in either the second or third row with the BPA424 Access Spline
- Take two tiles and connect them with an E10 Flat Spline and then insert BPC234 Closing Spline into the kerf of the adjacent sides of the tiles
- The hooks of the BPC234 closing spline lay over the top of the BPA424 and the kerfs of the outer edges of the tiles fit into the flange of the main tee and act as a hinge

- Install the E10 flat spline between the two access panels as the panels are lowered into place

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