

## DG-1.5 (Imperial) DATA CENTER GRID SYSTEM

### SUGGESTED INSTALLATION & MAINTENANCE PROCEDURE

#### PRELIMINARY

Identify various parts from reference drawings.

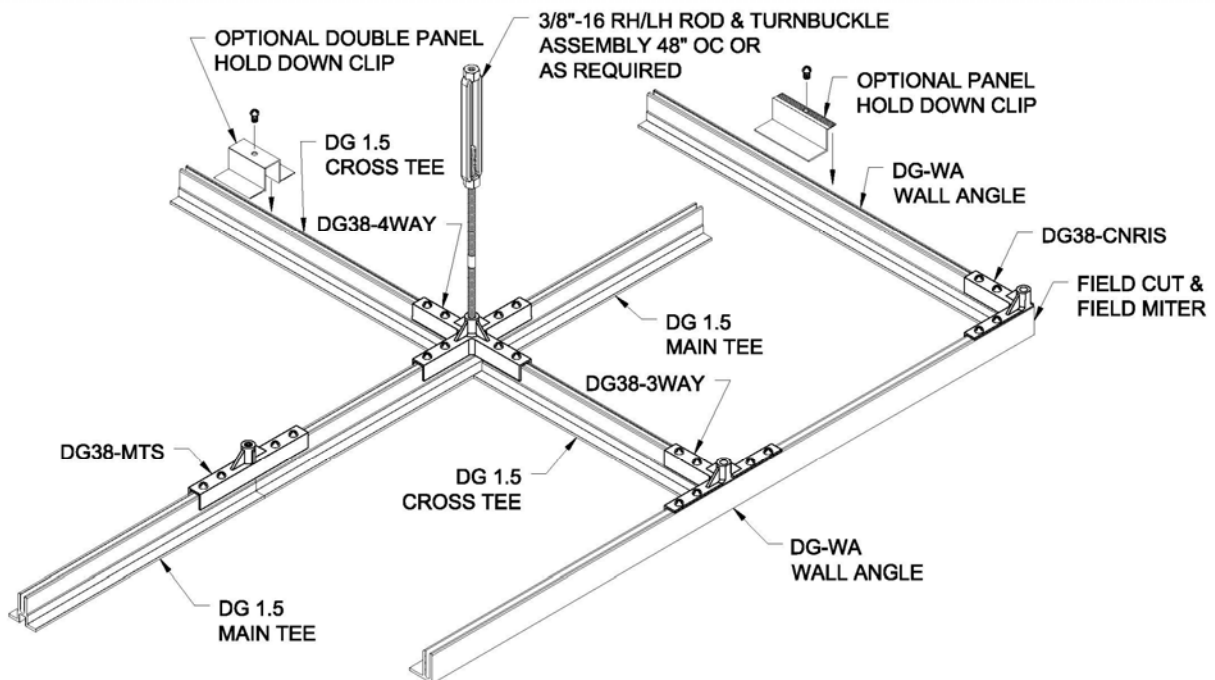
Refer to drawings to determine if the perimeter condition will be “Fixed” or “Floating”. Fixed perimeters utilize DG1.5-WA wall angle extrusions fastened to existing walls. Floating perimeters utilize perimeter main tees suspended from overhead.

#### “FIXED” PERIMETER WALL ANGLE INSTALLATION

Attach lengths of DG1.5-WA wall angle to walls using appropriate fasteners for your type of existing wall. It is advisable to pick one wall as a starting point, and begin attaching wall angle from the center of the wall out toward the corners.

A laser or other suitable leveling tool should be used to assure a consistently level finished product.

Continue attaching wall angle around walls and columns, if any, until complete. Cuts at corners can be made with any power miter saw with a non-ferrous, carbide-tipped blade. Special cuts on cross and main tees may be made in the same manner.



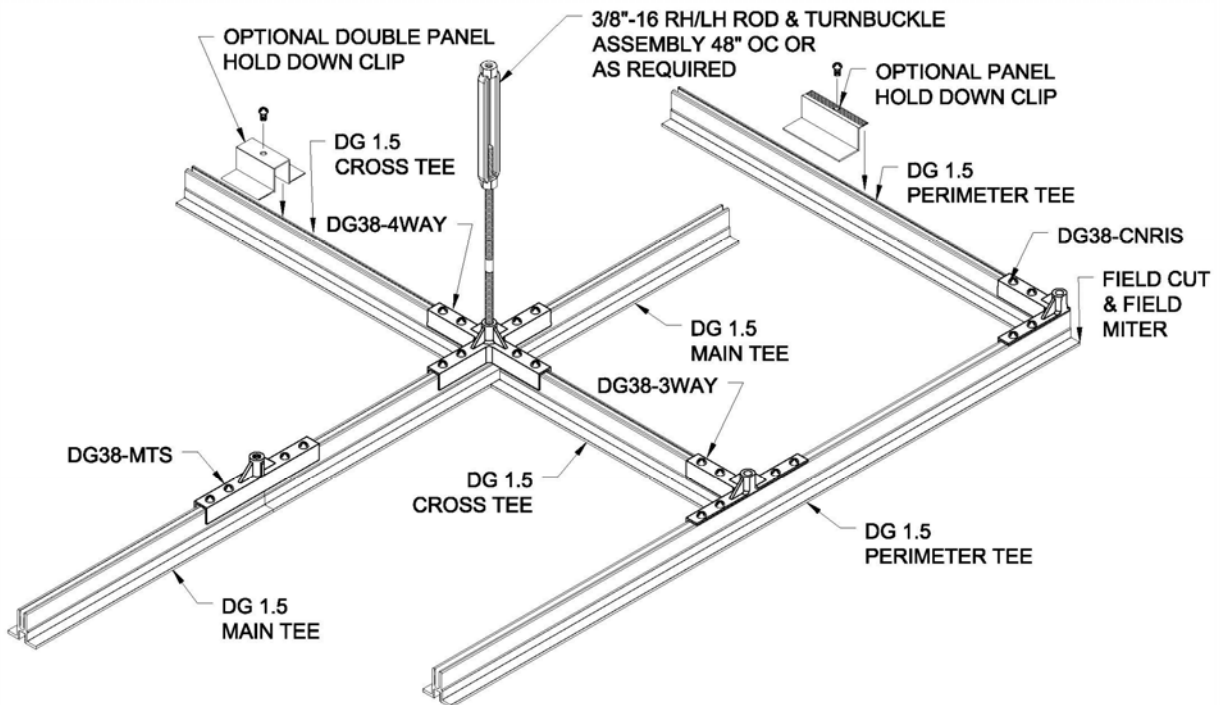
## "FLOATING" PERIMETER MAIN TEE INSTALLATION

On some projects, an optional closure wall angle, typical of the Gordon WA-2 is utilized. If called for, the closure wall angle will be installed before the perimeter ceiling main runners are suspended. Attach lengths of closure wall angle to walls using appropriate fasteners for your type of existing wall. It is advisable to pick one wall as a starting point, and begin attaching wall angle from the center of the wall out toward the corners.

Suspend lengths of DG 1.5 MT extrusions from overhead building structure, via 3/8-16 or M-8 metric thread all thread (furnished by installing contractor) down to turnbuckles and 8-inch long starter rods furnished by Gordon. It is advisable to pick one wall as a starting point, and begin working from the center of the wall out toward the corners. Note: If closure wall angles are used, the outside flange of the perimeter main tees are suspended below the flange of the closure angle, using the turnbuckles on the perimeter main tees to draw the main tee flange up tightly to the flange of the closure angle.

A laser or other suitable leveling tool should be used to assure a consistently level finished product.

Continue suspending perimeter extrusions around walls and columns, if any, until complete. Cuts at corners can be made with any power miter saw with a non-ferrous, carbide-tipped blade. Special cuts on cross and main tees may be made in the same manner.



## T-BAR INSTALLATION

Once the perimeters are completely installed, the rest of the grid installation can begin. The castings are attached to the T-Grid using ¼"-20 screws. (2) Bolts per casting leg are required. This is most easily done with a power drill or other such tool. The grid is suspended with 3/8 – 16 x 8" right-hand/left-hand threaded starter rod for which the castings are already tapped. The 6" body turnbuckle is used for connection to 3/8-16 threaded rods hanging from building structure (furnished by installing contractor) every 4 feet along the main runners, for a 4' x 4' grid pattern.

The most common installation method is to hang all of the threaded rods, turnbuckles and starter rods from building structure, to a "rough level" condition. Grid sections are typically assembled into 4' x 12' "ladders", either on a protected floor or on work benches, and then hoisting them into place, and attaching the suspension rods to the grid castings at the typical 4' x 4' centers. The cross tees are joined to the main tees with the die cast 4-way connectors, bolted together using the ¼-20 bolts supplied by Gordon.

Special size cross and main tee bar pieces will also have to be cut with the use of a miter saw with a non-ferrous, carbide-tipped blade. Again, care must be taken not to leave any gap at the joints. Main tee splices should always be located mid module and never at a 4-way intersection.

## GASKET SEAL - Optional

If required for the job, Gordon provides factory applied gasket tapes on all grid members. Cross tees have a precision cut gasket overhang on either end with a peel-away strip on the bottom. After grid members are bolted together, carefully peel off the backing strip and press firmly in place to affix the adhesive bottom of the gasket securely to the grid flange.

Properly installed, the die cut end of the cross tee gasket will compress against the side of the main tee gasket to effect an air-tight seal under compression.

## MODULE INSTALLATION

Once the grid is installed, the module installation can begin. If lay-in lamp modules are to be used, they should be installed first. This is to make wiring easier. Once the light fixtures are in place and wired, the cable trays or other utilities or equipment may be suspended from the 3/8-16 Screw Slot thread boss in the face of the grid members. This is accomplished by screwing the connection fasteners directly into the Screw Slot using a washer and 3/8-16 hex nut to lock the suspension fastener securely in place.

## CEILING BLANK TILES

After all of the lighting and utility racks are in place, the blank panels are installed. Properly sized panels are placed into the grid openings where shown in the project drawings. If required, optional blank panel hold down clips are secured to the thread boss in the top of the grid extrusions utilizing ¼-20 x 3/8 bolts, furnished by Gordon.

## MAINTENANCE

When suspending loads from the DG 1.5 grid, the installer should take care not to over-tighten bolts. First, tighten bolts by hand and then use a wrench to tighten 1/8 to 1/4 turn. If using a lock washer it should only be tightened to the point of compressing the lock washer.

## CLEANING POWDER COATED, ANODIZED, AND POLYVISION CERAMIC STEEL FINISHED PRODUCTS

Gordon's clear anodized and powder coated aluminum products may be kept clean and bright using the following steps:

1. For normal cleaning, a soft cloth with mild soap and water should be used. Material should have excess water wiped off.
2. If cleaning has been postponed for an extended period time and/or a tough "stain" is visible, first follow step one above. If this does not sufficiently clean the material, you should use a soft cloth with a 50-50 mixture of water and Isopropyl Alcohol. Material should have excess liquid wiped off.
3. If step one and two above is still not sufficient, you may use the 50-50 mixture of water and Isopropyl Alcohol with a small amount of "Comet" dabbed on the cloth. The damp cloth with the "Comet" should be used in a circular motion being careful not to rub too hard and leave scratches in the finish. Once done, the material must be wiped clean with a damp cloth to remove any "Comet" residue.