

# WS Gel Seal Grid System

## Attributes

- Gordon's WS Gel Grid systems are used in a variety of pressurized plenum cleanroom applications, including semiconductor, microelectronic, pharmaceutical, biotechnology, medical device, and aerospace.
- All of Gordon's WS systems feature 2-inch wide extruded aluminum grid members joined by one of the Gordon connector systems, rod-hung suspension and factory-notched gel channels for simple cross tee location and rapid field installation.
- **WS-20** utilizes 1/4-20 threaded rod for suspension
- **WS-38** utilizes 3/8-16 threaded rod for suspension
- **WS-LOC** utilizes 3/8-16 threaded rod for suspension, along with custom factory notching for connector location.
- Gordon is the only grid manufacturer providing cross tees with ends which are back cut and coped in our factory to allow for better face alignment, ease of installation, and extra system strength.
- All systems are non-progressive, and can be factory-fabricated to specified grid module sizes.
- Standard grid members can be provided with either clear-anodized or powder coat white finish.



WS-20 Gel Seal Grid

### WS Parts

Part Number	Description	A-Web Depth	B-Flange Width	Length	Weight per LF	Pieces per carton	Linear feet per carton
WS-20-MT	Main Tee	2-1/32"	2"	12'	0.85	8	96
WS-20-48	Cross Tee	2-1/32"	2"	4'	0.85	16	144
WS-20-24	Cross Tee	2-1/32"	2"	2'	0.85	36	72
WS-20-WA	Wall Angle	2-1/32"	1-1/4"	12'	0.54	12	144
WS-20-PT	Perimeter tee/notched 24" or 48" O.C.	2-1/32"	2"	12'	0.85	8	96
WS-PZ "Z" trim (specify size)	Perimeter "Z" trim works in conjunction with a perimeter tee						

### WS Load Table

Deflection Formula	L/360	L/180	L/360
Hanger Spacing (Span)	48"	48"	24"
Main Tee Spacing	48"	48"	48"
Maximum Point Load (LBS)	296	314	629
Maximum Uniform Load (LBS./LF)	74	78.5	314.5
Applied Load (LBS./SF)	18.5	19.6	78.6
Deflection at mid-span	1/8"	1/4"	1/16"

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## Technical Information

### Extrusions

Grid members shall be extruded of aluminum alloy 6063, with temper T5, and shall feature upturned flanges to create a channel to receive the filter sealant gel, and a continuous 1/4-20 screw boss for field attachment of connecting and suspending devices. Cross tees shall have ends which are factory back cut and coped for optimal face alignment and system strength.

### Finishes

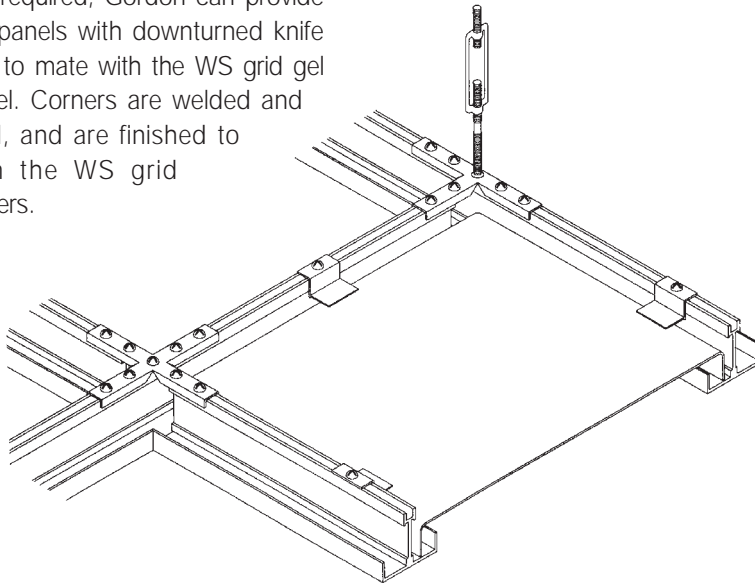
Standard finishes are either clear-anodized or white powder coat. Custom finishes are also available.

### Light Fixture Compatibility

**Teardrop fixtures:** Gordon's WS systems are designed to mate perfectly with standard 2-inch teardrop light fixtures. For greatest ease of installation, consider the Gordon WS-ScrewSlot extrusion shown at right.

### Custom WS Blank Panels

When required, Gordon can provide blank panels with downturned knife edges to mate with the WS grid gel channel. Corners are welded and sealed, and are finished to match the WS grid members.



### Custom specification inquiries.

For inquiries regarding custom product application, specification and pricing, contact your Gordon Cleanroom Products Division representative or Customer Service at P.O. Box 4347, Shreveport, LA 71134, 888-315-1561, or outside the U.S. (318) 213-5020.

### Fire Protection:

Fire sprinkler penetrations may be accomplished via nominal 6-inch x 24-inch sprinkler blank panels, clamped in place and having a hole for sprinkler pipe installation. Optional thru-grid sprinkler provision is available utilizing exclusive FlexHead fire sprinkler assemblies thru factory fabricated grid penetrations. These assemblies are F.M. approved, and feature 6-foot long flexible stainless steel supply pipe on a 24-inch long nipple with mounting brackets and factory-installed sprinkler head.

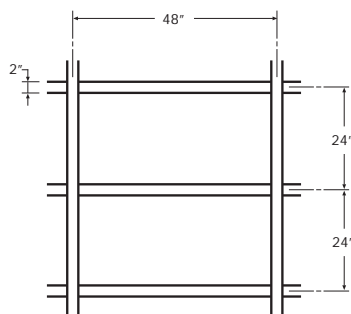
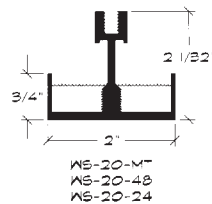
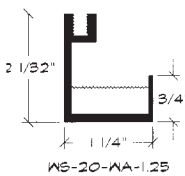
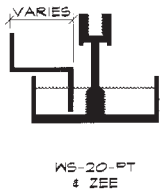
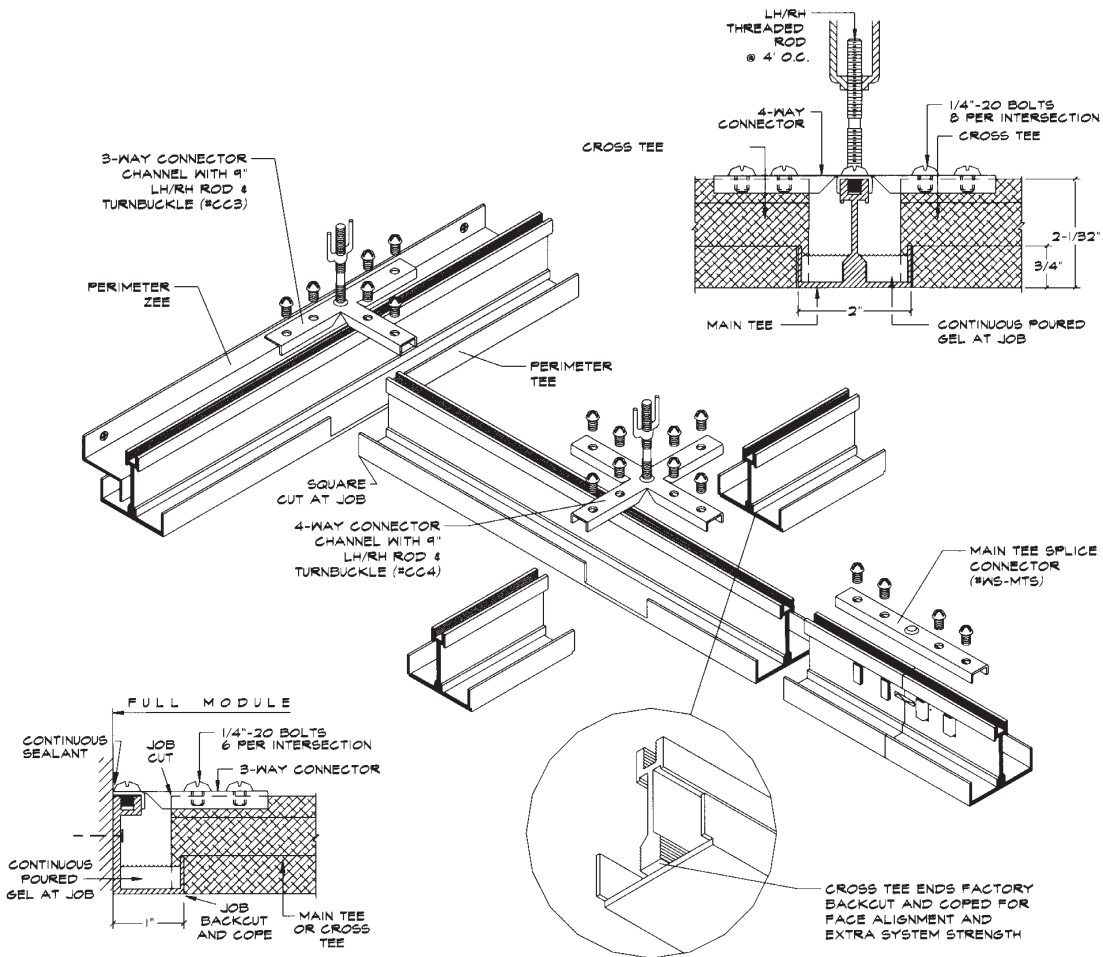


WS-ScrewSlot Grid

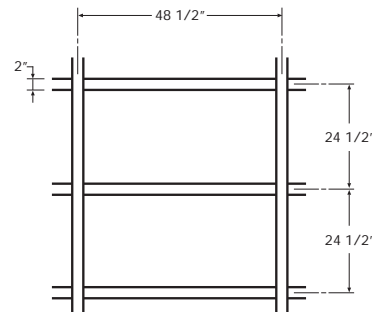
### WS-ScrewSlot Grid

When utilizing in-room utility/process pipe racking or teardrop light fixtures with 2-inch grid, consider the WS-ScrewSlot (shown above) for the fastest, simplest, and cleanest installation alternative. Featuring a 1/4-20 continuous screw boss in the room side surface of the main tee, the WS-ScrewSlot extrusion allows for fast easy attachment of fasteners, rack attachments or teardrop light fixtures. And *no drilling is required*, eliminating any potential leak path into the cleanroom from the pressure plenum, and making installation of lighting and accessories clean and simple. A vinyl trim insert provides an attractive, secure seal for mains where no attachments are installed. The insert may be removed, trimmed, or relocated as additional equipment is installed or relocated. Consider this labor-saving, value added solution when reviewing your unique cleanroom design requirements.

# WS Installation Details

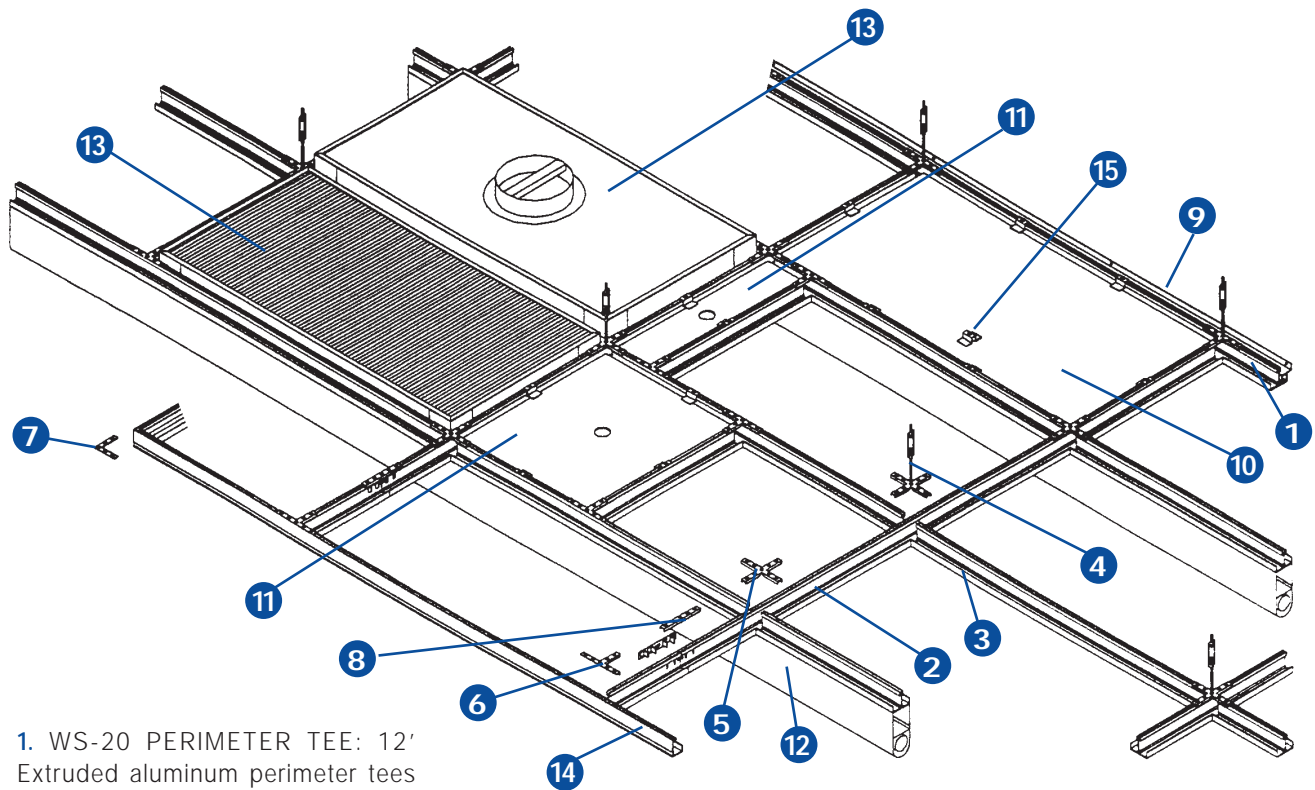


PARTIAL REFLECTED CEILING PLAN  
24" X 48" GRID MODULE



PARTIAL REFLECTED CEILING PLAN  
24 1/2" X 48 1/2" GRID MODULE

# WS Components & Accessories



**1. WS-20 PERIMETER TEE:** 12' Extruded aluminum perimeter tees provide an excellent solution for maintaining standard filter sizes and interfacing with uneven walls. Perimeter tees are factory notched on 24" or 48" centers, or as required to accommodate intersecting cross tees.

**2. WS-20 MAIN TEE:** Extruded aluminum main tees are shipped in 12' lengths and factory notched on 24" or 48" centers, or as required. Each main tee has a square cut end and are joined together using the main tee splice connector.

**3. DS-CROSS TEE:** 4' or 2' extruded aluminum cross tees are back cut and coped at each end to ensure a secure connection to the main tee.

**4. ROD/TURNBUCKLE:** ASTM rated LH/RH 9" long 1/4" threaded zinc plated steel rod with ASTM rated 4" LH/RH zinc plated steel turnbuckle spaced on 48" centers or as required.

**5. 4-WAY CONNECTOR:** Specify G-20, G-38, or LOC connector with eight zinc plated steel bolts used at the intersection of two cross tees and the main tee.

**6. 3-WAY CONNECTOR:** Specify G-20, G-38, or LOC connector with six zinc plated steel bolts used at the intersection of tees and perimeter condition.

**7. 2-WAY CORNER CONNECTOR:** Specify G-20, G-38, or LOC connector with four zinc plated steel bolts used at a perimeter corner condition.

**8. MAIN TEE SPLICE CONNECTOR:** Specify G-20, G-38, or LOC connector with four zinc plated steel bolts used to splice together main tees.

**9. PERIMETER TRIM:** Aluminum closure for the space between the floating perimeter tee and wall, as required from 1" to 5 1/2".

**10. BLANK PANELS:** Blank panels with knife edge are fabricated from aluminum sheet with welded and sealed corners; painted to match the grid.

**11. SPRINKLER ADAPTER PANEL -** Custom panels with knife edges and a factory penetration to accommodate a separate 1" Sprinkler drop. Finished to match grid.

**12. LIGHTS-TEAR DROP:** Teardrop type light fixtures may be mounted directly to flat flange of the tee. Lighting supplied by others.

**13. FILTER MODULES:** Pressurized plenum applications or ducted modules are compatible with the DS or WS system.

**14. WS-20 PERIMETER ANGLE:** 12' extruded aluminum wall angles are butted together and sealed for continuous installation.

**15. HOLD DOWN CLIPS:** Optional hold down clips for panels.