



Recycled  
Content:  
**50%**  
Co-Extruded Aluminum

## CLEAN ROOM™ Grid Systems

Available in co-extruded aluminum, Clean Room Grid systems offer a choice of 1-1/2" or 15/16" face to facilitate the use of clean room lay-in panels.

### Key Selection Attributes

- Suitable for use in Class 5 or greater without hold down clips (Class 100 clean rooms as defined by ISO Standard 14644-1 (Federal Standard 209E) when used with CLEAN ROOM Mylar and CLEAN ROOM VL

### Co-Extruded Aluminum

- Aluminum construction for maximum corrosion resistance and non-magnetic environments
- Lightly textured PVC face, to better match VL Clean Room panels
- Unique, factory applied gasket for better seal between panel and grid
- Staked on main beam splice for easy connections and module control
- Integral hook cross tee end detail for easy connections and module control
- 10-year limited warranty; 30-year with **HumiGuard™ Plus**

### Typical Applications

- Automotive & aerospace
- Computer rooms
- Hospitals
- High tech manufacturing
- Non-magnetic areas

## Product Description

### Materials

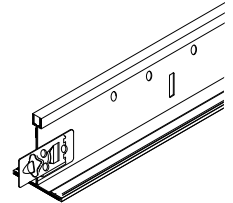
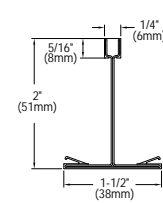
#### A. General:

ASTM C 635 (Intermediate-duty) main beam classification, co-extruded aluminum. All surfaces are PVC.

#### B. Components:

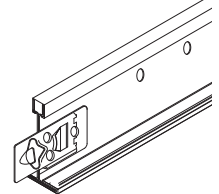
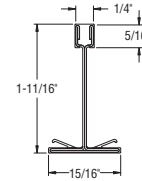
1. Main Beams:  
co-extruded aluminum construction, 2" profile height and 1-1/2" flange

EA7903 (144", routs 12" OC, Intermediate-duty)



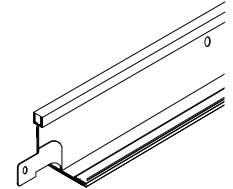
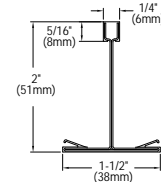
2. Main Beams: co-extruded aluminum construction, 1-11/16" profile height and 15/16" flange

EA7900 (144", routs 12" OC, Intermediate-duty)



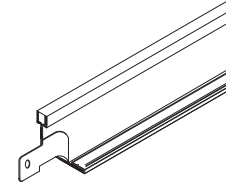
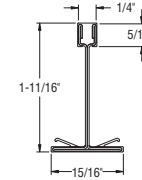
3. Cross Tees: co-extruded aluminum construction, profile height 2" and 1-1/2" flange

EA7947 (48", center rout)  
 EA7927 (24")



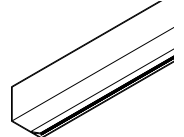
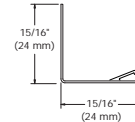
4. Cross Tees: co-extruded aluminum construction, 1-11/16" profile height and 15/16" flange

EA7940 (48", center rout)  
 EA7920 (24")



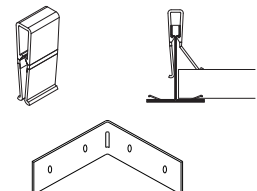
5. Wall Molding:  
co-extruded aluminum

EA7801 (144", extruded angle molding, nominal 15/16" x 15/16")



#### 6. Accessories:

- CHDC - PVC Hold Down Clip – use with Co-Extruded Aluminum Clean Room Grid.
- XTAC – Cross Tee Adapter Clip – hot dipped galvanized steel, use to attach field cut cross tees to main beams



# CLEAN ROOM Grid Systems



## Physical Data

### Material

Co-Extruded Aluminum with PVC face – Gasketed

### Surface Finish

PVC

### Cross Tee/Main Beam Interface

Co-Extruded Aluminum Clean Room – Flush Fit

### End Detail

Main Beam: Staked-on clip

Cross Tee: Integral hook

### Main Beam Load Test Data

| MAIN BEAMS | LENGTH | WEB HEIGHT | ASTM CLASS        | HANGER SPACING<br>(Lbs./L.F. Simple Span)** |     |
|------------|--------|------------|-------------------|---|-----|
|            |        |            |                   | 4'  | 5'  |
| EA7903     | 144"   | 2"         | Intermediate-duty | 14.0  | 8.4 |
| EA7900     | 144"   | 1-11/16"   | Intermediate-duty | 14.0  | —   |

### Cross Tee Load Test Data

| CROSS TEE | LENGTH | WEB HEIGHT | HANGER SPACING<br>(Lbs./L.F. Simple Span)** |      |
|-----------|--------|------------|---|------|
|           |        |            | 4'  | 2'   |
| EA7947    | 48"    | 2"         | 18.3  | —    |
| EA7927    | 24"    | 2"         | 48.0  | —    |
| EA7940    | 48"    | 1-11/16"   | 12.25                                       | —    |
| EA7920    | 24"    | 1-11/16"   | —   | 40.3 |

### Seismic Performance

| MAIN BEAMS     | MINIMUM LBS. TO PULL OUT<br>COMPRESSION/TENSION |
|----------------|---|
| EA7903, EA7900 | 294.6   |

| CROSS TEES                        | MINIMUM LBS. TO PULL OUT<br>COMPRESSION/TENSION |
|-----------------------------------|---|
| *EA7947, EA7927<br>EA7940, EA7920 | 492.4   |

\*Note: Requires use of #6 Phillips self-tapping screw through cross tee end detail.

### ICC Reports

Co-Extruded Aluminum Clean Room Grid ICC report is pending.

**NOTE: Specify light fixtures designed to install with 1-1/2" face suspension systems when using 1-1/2" face product to allow for fixture maintenance**

| Compatible Light Fixtures: | MANUFACTURER        | ITEM #                    |
|----------------------------|---------------------|---------------------------|
|                            | Lithonia            | CLRM-150 SRT-2x4_F MP4270 |
|                            | Guth                | KLEENSEAL KRT 200         |
|                            | Clean Air Solutions | CR*-xxx-ESB               |
|                            | Morlite             | CRGHEPA24 Series          |

## Color Selection

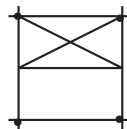
WH - White

## Maximum Fixture Weight

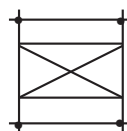
### A. Main Beam to Main Beam

Main Beam ↑  
Hanger Wire (•)

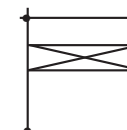
- |                    |            |
|--------------------|------------|
| 1. Fixture*        | 24" x 48"  |
| 2. Planning Module | 48" x 48"  |
| 3. Hanger Spacing  | 48"        |
| 4. Item EA7903     | 100.0 lbs. |



- |                    |           |            |
|--------------------|-----------|------------|
| 1. Fixture*        | 24" x 48" | 12" x 48"  |
| 2. Planning Module | 48" x 48" | 48" x 48"  |
| 3. Hanger Spacing  | 48"       | 48"        |
| 4. Item EA7903     | 70.0 lbs. | 100.0 lbs. |



- |                    |           |
|--------------------|-----------|
| 1. Fixture*        | 12" x 48" |
| 2. Planning Module | 48" x 48" |
| 3. Hanger Spacing  | 48"       |
| 4. Item EA7903     | 69.0 lbs. |

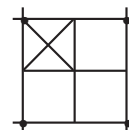
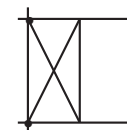


Main beams tested as follows:  
7907 tested at 17.9 lbs./lin. ft. to 1/360 of 4' span.  
EA7903 tested at 15.9 lbs./lin. ft. to 1/360 of 4' span.

### B. Cross Tee to Cross Tee

Main beams ↑  
Hanger Wire (•)

- |                    |            |            |
|--------------------|------------|------------|
| 1. Fixture*        | 24" x 48"  | 24" x 24"  |
| 2. Planning Module | 48" x 48"  | 48" x 48"  |
| 3. Hanger Spacing  | 48"        | 48"        |
| 4. Item EA7947     | 100.0 lbs. | 100.0 lbs. |



48" cross tees tested as follows:  
EA7947 tested at 18.4 lbs./lin.ft. to 1/360 of 4' span.  
\*Fixtures weighing more than 56 lbs. should be independently supported. Fixture weight is based on single fixture only. For end-to-end fixtures or other configurations not shown, consult your Armstrong representative.

NOTE: The above data is based on 48" hanger wire spacing, board weight of 1 lb./sq. ft., maximum deflection of tees not to exceed 1/360 of the span, and suspension system installed in accordance with ASTM C 636.

\*\*To derive maximum lbs./SF, divide the on-center spacing of the component into the lbs./LF given in the load test data table.