

# CEILING SYSTEMS

[ Between us, ideas become reality.™ ]

TECHNICAL GUIDE

DrywallGridSystem

## STUCCO/PLASTER Grid Systems

Hanging and Framing  
Stucco/Plaster Ceilings



**Armstrong**

**Features and Benefits**

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**Wind Load**

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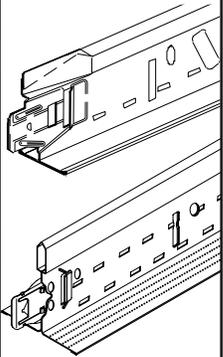
## Performance

- **PeakForm™** patented profile increases strength and stability for improved performance during installation
- **SuperLock™** main beam clip is engineered for a strong secure connection and fast accurate alignment confirmed with an audible click; easy to remove and relocate
- **ScrewStop™** reverse hem prevents screw spin off on 1-1/2" wide face
- **Rotary-stitched** — Greater torsional strength and stability
- **1-1/2" wide face** main beams and cross tees — Easy installation of screw applied gypsum wallboard
- **G40 hot dipped galvanized coating** — Superior corrosion resistance
- **G90 hot dipped galvanized coating** — Available for exterior application
- **Heavy-duty load rating** — Minimum 16 Lbs./LF on main beams and cross tees
- Wind uplift construction available

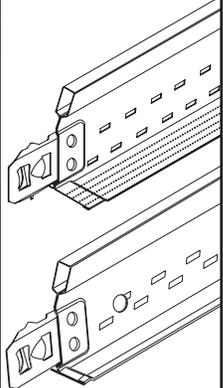
## Code Compliance

- Meets ASTM C 635
- Meets ASTM C 645
- Installation per ASTM C 636
- Installation per ASTM C 754
- ICBO Evaluation Report Number ES-5413
- Department of State Architect — DSA PA105
- City of LA — RR 25348
- Consult local codes for specific requirements

### Main Beams

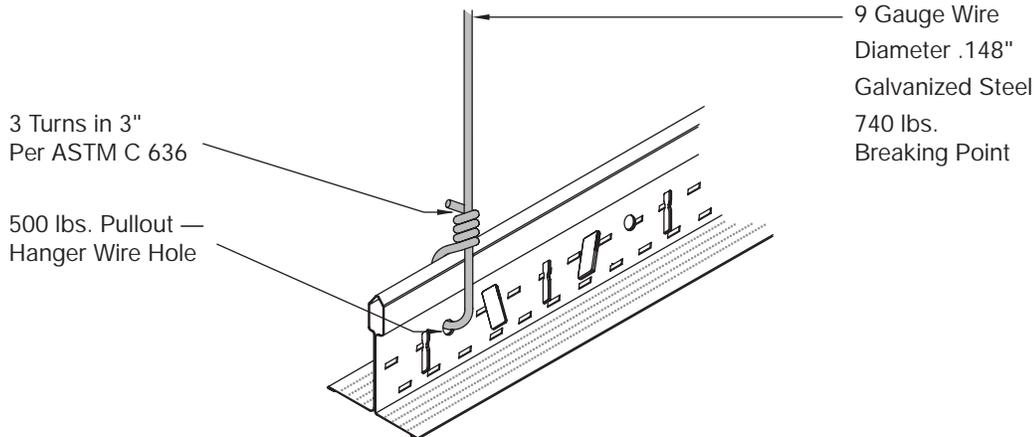
Item #	Length	Face Dimension	Duty Load	Fire Rated	Routs	Load Test Data (Lbs./LF)						Perspective
						L/360 wires at			L/240 wires at			
						2'	3'	4'	2'	3'	4'	
HD8901	144"	15/16"	Heavy duty	Yes	51 routs—starting 2-1/4" from each end (type "F" fixture compatible)	80.1	31.4	16.5	123.2	46.3	24.75	
HD8906 HD8906G90	144"	1-1/2"	Heavy duty	Yes	51 routs—starting 2-1/4" from each end (type "F" fixture compatible)	95.5	35.8	17.6	143.0	57.3	28.14	

### Cross Tees

Item #	Length	Face Dimension	Fire Rated	Routs	Load Test Data (Lbs./LF)						Perspective
					L/360 wires at			L/240 wires at			
					2'	3'	4'	2'	3'	4'	
XL7231 XL7231G90	36"	15/16"	No	none	33.0			49.5			
XL7936G90	36"	1-1/2"	No	none	33.33			49.96			
XL8925 XL8925G90	26"	1-1/2"	No	2 routs—12" from each end (type "F" fixture compatible)	98			147			

### Wire Load

#### 9 Gauge Wire Breaking Strength and Technical Data

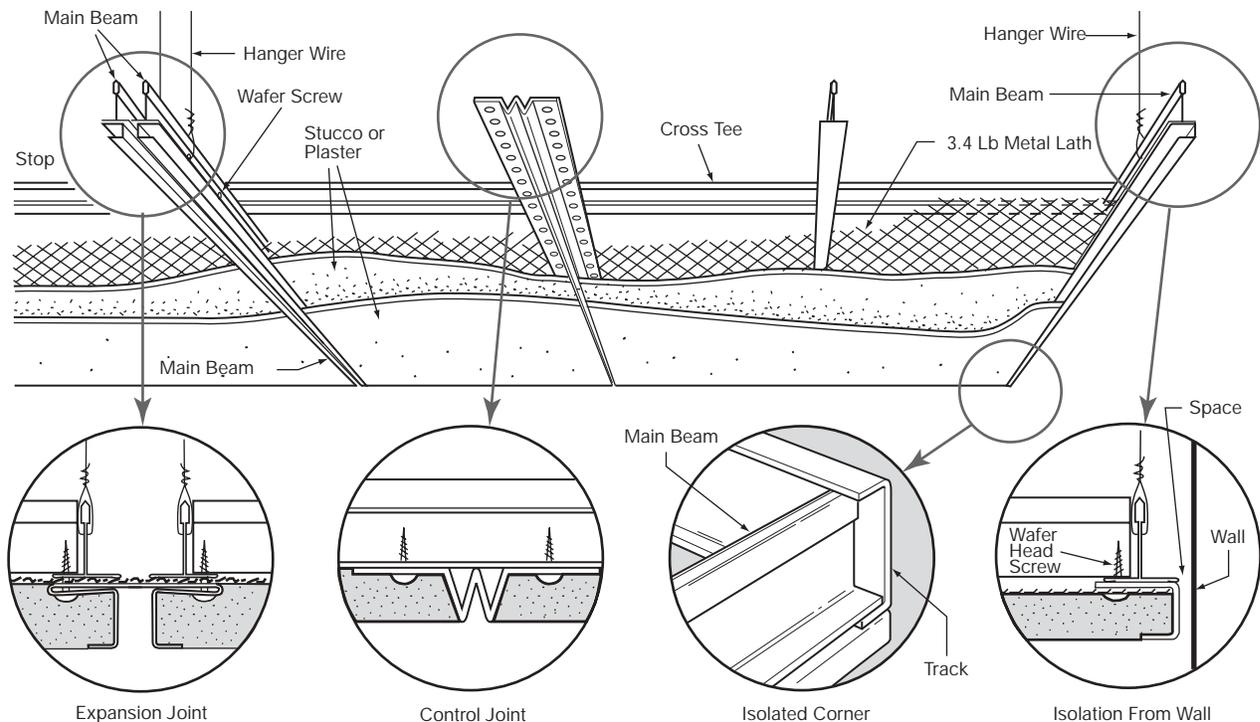


## Stucco/Plaster Grid Suspension Installation

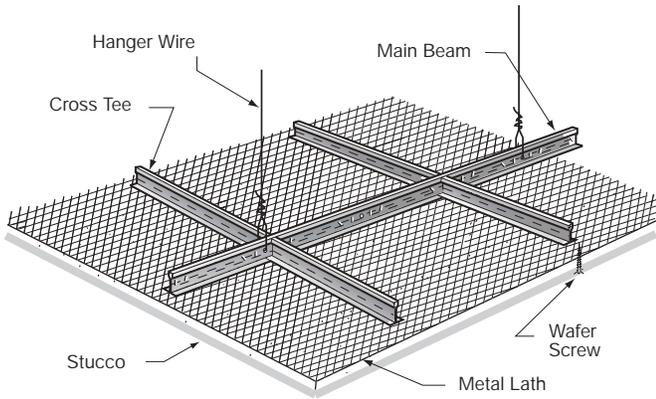
1. Install main beam with 9 gauge hanger wire spaced 36" on center. Space main beam 36" on center.
2. Install 36" cross tee, spaced 16" on center.
3. Isolation at perimeters is mandatory when installing any stucco system. Install perimeter channel molding at wall/ceiling junctures to support tees independent of walls. Use main beam at cut cross tee perimeters and galvanized track on main beam perimeters.
4. Install 3.4 Lb. galvanized diamond mesh or flat ribbed lath with wafer head self drilling screw to cross tees (use cadmium coated screws on exterior applications).
5. Expansion Joints – Installed in accordance with Metal Lath/Steel Framing Association Specifications/Standards.
6. Control Joints – Installed in accordance with Metal/Lath Steel Framing Association Specifications Standards.
7. Plaster stops, grounds, and corner pieces are attached to system with wafer head screws and/or 18 gauge tie wire.
8. Plaster or stucco mixture and thickness to be in accordance with manufacturer's recommendations and applied: ASTM C 842 – For Gypsum Plaster and ASTM C 926 – For Portland Cement-based Plaster.
9. For exterior application use steel studs for vertical bracing (see page 6 for wind load).

For further information, contact your local representative or TechLine at 877 ARMSTRONG.

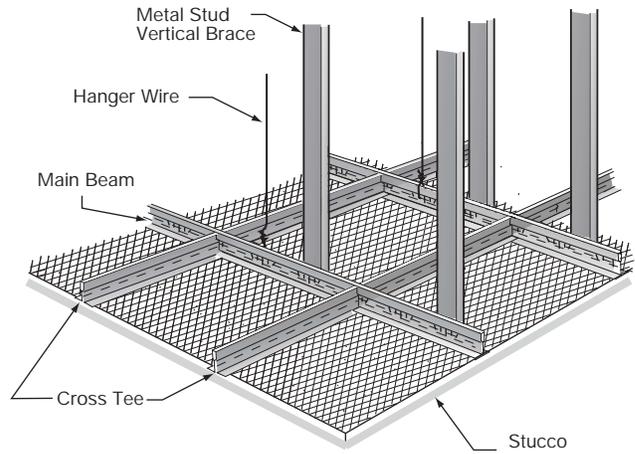
## Details of Stucco/Plaster Systems



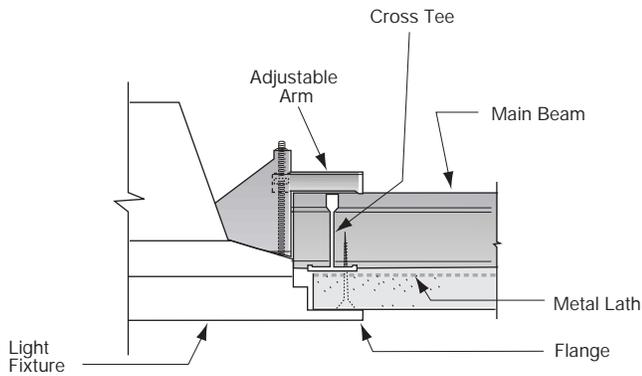
### Suspended Metal Lath and Stucco



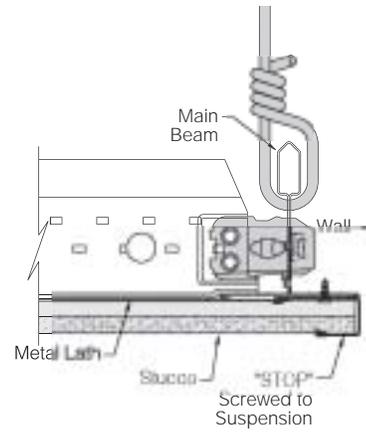
### Exterior Wind Loaded (See chart on page 6)



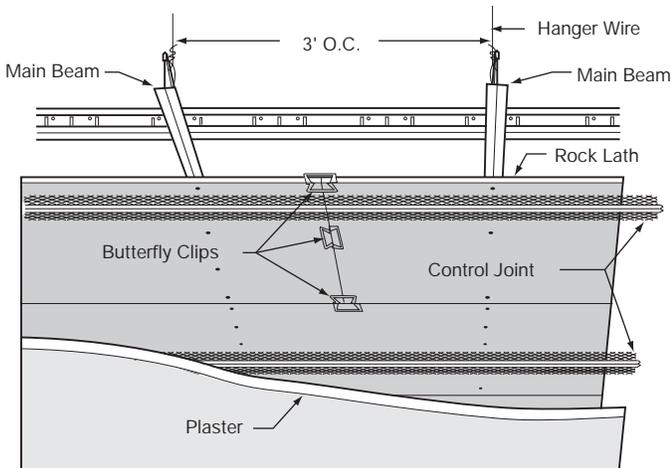
### Lighting Troffer



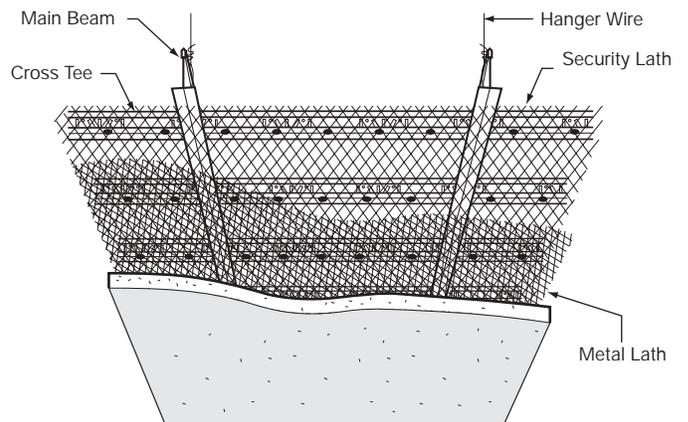
### Stucco Perimeter Stop



### Rock Lath and Plaster



### Security Metal Lath and Plaster



**Wind Load Ceiling Design**

Vertical Height in Plenum	Up Lift Load (mph)	Stud Gauge	Stud Thickness	Lath	Main Runner Spacing	Cross Tee Spacing	Hanger Wire Spacing	Cross Tee Length	Stud Spacing
0 ↓ 6'6"	15	20	2-1/2"	Metal Lath	36"	16"	3' o.c.	3'	4'
	30	20	2-1/2"	Metal Lath	36"	16"	3' o.c.	3'	4'
	45	20	2-1/2"	Metal Lath	36"	16"	3' o.c.	3'	4'
	60	20	2-1/2"	Metal Lath	24"	16"	3' o.c.	2'	4'
	90	20	2-1/2"	Metal Lath	24"	16"	3' o.c.	2'	4'
6'7" ↓ 10'3"	15	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	30	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	45	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	60	20	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'
	90	20	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'
10'4" ↓ 15'0"	15	20	2-1/2"	Metal Lath	36"	16"	3' o.c.	3'	4'
	30	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	45	18	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	*60	20	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'
	*90	18	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'
15'1" ↓ 20'0"	15	20	2-1/2"	Metal Lath	36"	16"	3' o.c.	3'	4'
	30	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	45	20	3-5/8"	Metal Lath	36"	16"	3' o.c.	3'	4'
	*60	20	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'
	*90	18	3-5/8"	Metal Lath	24"	16"	3' o.c.	2'	4'

\* NOTE: CSJ strut (stud) 3-5/8" 20 gauge bridging at mid-span block and strap method

# CEILING SYSTEMS

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## 1 877 ARMSTRONG (1 877 276 7876)

- Name of your Inner Circle Contractor or Gold Circle Distributor or Sales Representative
- Customer Service Representatives  
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- **TechLine** — Technical information —  
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FAX 1-800-572-8324 or email: techline@armstrong.com
- Product literature and samples — Express service or regular delivery
- Request a personal copy of the Armstrong Ceiling Systems catalog

## [www.armstrong.com/contractoronly](http://www.armstrong.com/contractoronly)

- Latest product and program news
- Real time selection and technical information
- Contacts — reps, where to buy, how to install
- Submittal pages
- Literature and samples information
- Perimeter and Corridor Design Solutions, CAD renderings

# COMMERCIAL FLOORING

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- Commercial vinyl, hardwood, linoleum, luxury solid vinyl and VCT flooring
- Wall base and installation accessories
- Armstrong Guaranteed Installation Systems

Metal suspension manufacturers accept no responsibility for water damage done to Stucco and Plaster installations systems by water leaks, misapplication, acts of God or faulty installation. We do accept responsibility for Metal System performance in a plum and level surface for attachments with screws as stated in our literature.

These drawings show typical conditions in which the Armstrong product depicted is installed. They are not a substitute for an architect's or engineer's plan and do not reflect the unique requirements of local building codes, laws, statutes, ordinances, rules and regulations (Legal Requirements) that may be applicable for a particular installation.

Armstrong does not warrant, and assumes no liability for the accuracy or completeness of the drawings for a particular installation or their fitness for a particular purpose. The user is advised to consult with a duly licensed architect or engineer in the particular locale of the installation to assure compliance with all Legal Requirements.

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Engineering data included provided by outside engineering company.

