

Chicago Metallic™ 650 (Hook)/670 (Stab) Fire Rated Drywall Grid System

Product

Applications

Hospitals, hospitality, retail, lobbies, department stores, galleries, residential high rise.

Features

- Heavy duty grid systems for drywall ceiling framing.
- Fire, seismic and flatness control.
- Reduces onsite labor.
- Eliminates black-iron and hat-channel.
- Reliable appearance and cost control.
- Chicago Metallic suspension systems meet a Class-A flame spread rating in accordance with ASTM standard E1264-08.

Benefits

- Precise transition between acoustical and drywall ceilings.
- Sustainable: Minimum 25% recycled content, 100% locally recyclable, global/regional manufacture.

Material:

A. General

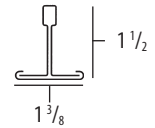
ASTM C 635 Heavy Duty (HD) furring runner classification; commercial quality steel, G-40 hot-dip galvanized body and knurled face cap, 1-3/8" width, 1-1/2" height. Also complies with ASTM C 645 and ASTM C 754.

Note: A metallurgist should be consulted regarding the suitability of this product for the environmental conditions in which it is being installed.

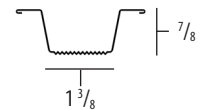
Components:

- | | |
|--|--|
| <p>1. Furring Runner:
Double web construction, 1-3/8" width, 1-1/2" height.</p> | <p><input type="checkbox"/> 650.00C (144", slots 8" OC, HD)</p> |
| <p>2. Cross Channel:
Double web construction, 1-3/8" width, 7/8" height.</p> | <p><input type="checkbox"/> 634.00C (48", no slots)</p> |
| <p>3. Furring Tees:
Double web construction, 1-3/8" width, 1-1/2" height.</p> | <p>Hook-type:
<input type="checkbox"/> 654.00C (48", no slots)</p> <p>Stab-type:
<input type="checkbox"/> 674.00C (48", one slot at midpoint, override)
<input type="checkbox"/> 677.00C (72", slots 24" O.C., override)</p> |
| <p>4. Cross Tee:
Double web construction, 15/16" width, 1-1/2" height.</p> | <p><input type="checkbox"/> 1274.01Z (48", three slots 12" OC)
Used to support NEMA Type G light fixture.</p> |
| <p>5. Wall Track:</p> | <p><input type="checkbox"/> 1450.00 (144", 1-9/16" x 1")</p> |
| <p>6. Utility Angle:</p> | <p><input type="checkbox"/> 5130.00H (120", 1-1/2" x 1-1/2")
<input type="checkbox"/> 5130K.00H (120", 1-1/2" x 1-1/2") Knurled Face</p> |
| <p>7. GRG Access Door and Frame:</p> | <p>Opening Size</p> <p><input type="checkbox"/> 8501.00 (9" x 9")
<input type="checkbox"/> 8502.00 (12" x 12")
<input type="checkbox"/> 850300 (18" x 18")
<input type="checkbox"/> 8504.00 (24" x 24")
<input type="checkbox"/> 8505.00 (30" x 30")</p> |

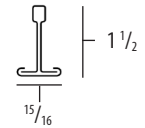
Furring Runner/ Furring Tees



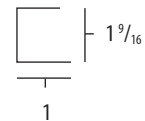
Cross Channel



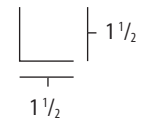
Cross Tee



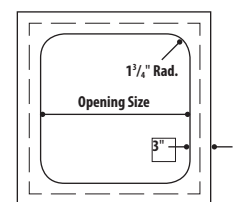
Wall Track



Utility Angle



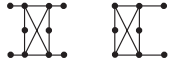
GRG Access Door



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Fire Rated Assemblies

Hanger Positions for Fire Rated Situations



This illustrates hanger positions for single fixtures in a field. Refer to specific design numbers for allowable number of fixtures per square footage of ceiling area.

UL® Fire Resistant Designs

Floor and Ceiling Designs – Type 650

D501, D502, D503, G523, G524, G525, G526, G527, G528, G529, J502, L211*, L502, L508, L513, L515, L525, L526, L529

Roof and Ceiling Designs – Type 650

P237*, P239*, P241*, P501, P506, P507, P508, P509, P510, P513, P514

* System used in upper plenum - Consult UL Fire Resistance Directory for details.

Component Load Test Data (based on $1/360$ span deflection)

ALLOWABLE LOAD per ASTM C635 [■]						
Furring Runner	Length	Component Dimensions		Metal	Hanger Spacing	
		Face	Height		4'	6'
650	12'	1 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	.020	HD	
Furring Channel						
634	4'	1 $\frac{3}{8}$ "	7 $\frac{7}{8}$ "	.020	8.2	
Furring Tees						
654	4'	1 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	.014	14.3	
674	4'	1 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	.014	14.3	
677	6'	1 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	.020	5.24	
Cross Tee						
1274.01	4'	1 $\frac{5}{16}$ "	1 $\frac{1}{2}$ "	.020	17.0	

[■]To convert data into lb/ft², divide on center spacing of component into lb/ft.

Membrane Loading

COMPONENT COMBINATION FR/FT	Data is Pounds Per Square Foot (PSF)	
	HANGER WIRE / FURRING TEE SPACING	
	48"/24"	32"/16"
650.00C / 654.00C	6.6 [▼]	7.7 [▼]
650.00C / 654.00C / 1274.01Z	5.5 [▼]	6.2 [▼]
650.00C / 674.00C	6.6 [▼]	7.7 [▼]
650.00C / 674.00C / 1274.01Z	5.5 [▼]	6.2 [▼]
650.00C/677.00C	2.62 [▼]	3.93 [▼]

[▼] Membrane loading is not applicable when these components are used in a fire rated assembly. Consult UL Fire Resistance Directory for installation details. 48"/24" data is based on hanger wires installed within 4" of each furring runner fire expansion.