



Fire-resistance ratings have long been used by UL, ASTM and building codes to measure the performance of various constructions for fire containment purposes. As applied to elements of buildings, the fire-resistance rating classifies the ability of an assembly to confine and isolate fire within a zone comprised of fire-resistance rated walls, ceiling and floor assemblies. These designs are identified in the UL Fire Resistance Directory, which is updated yearly and can be referenced at the Underwriters Laboratories website at

UL.com. For further information on specific UL Assembly designs, please visit: <https://iq.ulprospector.com/en>

**The purpose of this document is to guide installation practices of suspended ceiling systems in fire rated assemblies.**

#### **IMPORTANT DETAILS**

- The entire ceiling system must include fire rated components: USG Donn Brand Suspension Systems, USG Acoustical Panels, HVAC systems, structural members, etc.; no one component makes a ceiling fire-resistant
- USG Donn Brand Suspension Systems and Acoustical Panels comply with Underwriters' Laboratories, Inc requirements for  $\frac{3}{4}$ , 1, 1  $\frac{1}{2}$ , 2, and 3 hour fire-rate assembly ratings
- Depending on building code Floor-to-Ceiling and Roof-to-Ceiling Assemblies, the installation practices and components will vary
- Please consult the UL Fire Resistance Directory for up to date and specific requirements

## **ACOUSTICAL SUSPENDED CEILING FIRE RATED ASSEMBLY INSTALLATION GUIDE**


# INSTALLATION

## SUSPENSION SYSTEMS

### USG Donn Brand Suspension System and Acoustical Panel Notations

- Product names notated with an 'L' (ie. DXL24)
- Main Tees will have a Fire Notch near the end splice that allows the steel to absorb the heat expansion during fire conditions
- Carton packaging will come with stripe end caps and carry UL labeling requirements
- Hanger wires must be #12 or heavier gauge galvanized steel to support ceiling system

## ACOUSTICAL PANELS

- Firecode tile items notated with  on USG literature
- Carton packaging will be colored red and carry UL labeling requirements
- Ceiling Panels are notated with "Rep in Kind" or "FC" on the back of the tile identifying Fire Rating properties

## INSTALLATION GUIDELINES

Hanger Wire — Galv steel, 12 SWG min diam, tied to joists or cold-rolled channels 48 in. OC, to occur at intersections of cross tees and main runners. Additional hanger wires required at all four corners of each light fixture, at centers of cross tees immediately adjacent to light fixtures and at main runner splices.

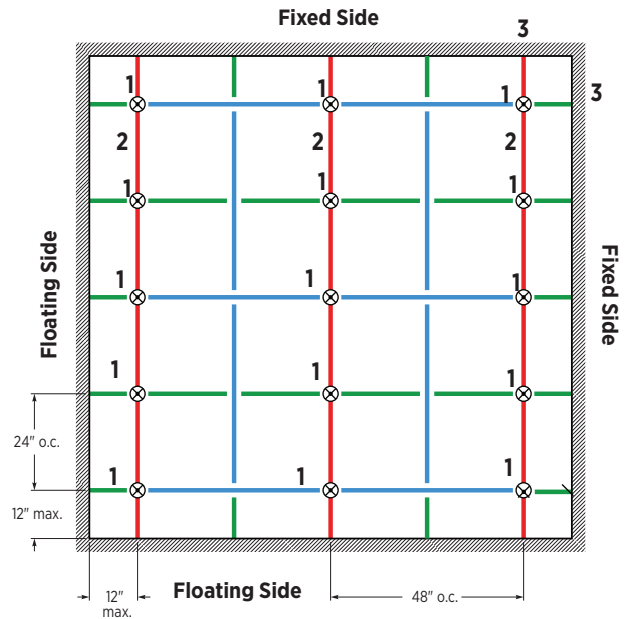
## FIRE RATED INSTALLATION GUIDE

### Install Details





1. Hanger wire to hang at each Main and Cross Tee intersection
2. Hanger wire to be placed between each Main Tee splice connection and Fire notch
3. Hanger wire at perimeter at corner of both fixed ends

### Additional Notes:

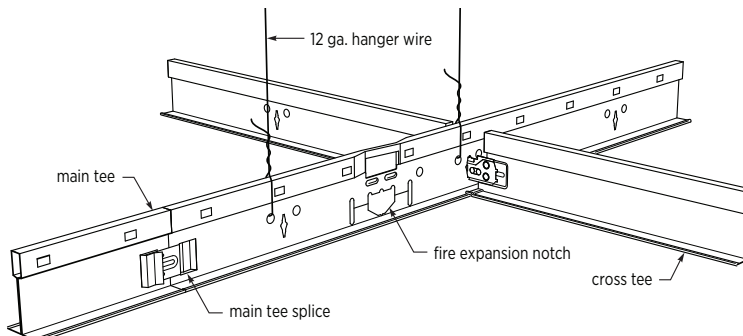
- All Cross Tees 60" and longer to be supported with hanger wire at midpoint
- Hold down clips required when fire-rated panel weighs less than 1 lbs/SF



Main Tees: 48 in. o.c.  
Cross Tees: 24 in. o.c.

-  Hanger Wire
-  Fire Rated Main Tee
-  Fire Rated 4' Cross Tee
-  Fire Rated 2' Cross Tee

## HANGER WIRE LOCATIONS



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ICS388 rev. 5-20  
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Chicago, IL 60661