



**FIRE-RESISTANCE-RATED
ROOF-CEILING & FLOOR-CEILING ASSEMBLIES
USING WEB JOIST TRUSSES & WEB-i I-JOIST**

Web Joist Trusses:

Web-Joist trusses used in one-hour fire-resistance-rated roof and floor-ceiling assemblies must be installed in accordance with Section 4.3 of ESR-2504, which refers to Section 4.2.2.4 of ESR-1338, or 2018, 2015 & 2012 IBC Table 721.1(3) Item No. 21-1.1. IBC-2021 & 2024 also includes Table 721.1(3), Item No. 21-1.1 for one-hour rating.

Gypsum Association ESR-1338, Section 4.2.2.4 refers to assembly FC5406 & FC5529. IBC Table 721.1(3), Item 21-1.1, show assemblies with 2-layers of 5/8" Type X gypsum wall board.

WEB-i I-Joists:

Web-i I-joists used in one-hour fire-resistance-rated roof and floor-ceiling assemblies must be installed in accordance with Section 4.2.2.4 of ESR-1338 or IBC Table 721.1(3) Item No. 21-1.1, and 23-1.1 through 28-1.1, and 30-1.1 & 31-1.1.

(Res. Chan. = Resilient Channels)

Section 4.2.2.4 of ESR-1338 & Gypsum Assoc. details FC 5406 & FC 5529, refer to (2) 5/8" Type X gypsum.

IBC Table 721.1(3), Item No. 21-1.1 - (2) 5/8" Type X gypsum

IBC Table 721.1(3), Item No. 23-1.1 - Res. Chan. & (1) 5/8" Type C gypsum

IBC Table 721.1(3), Item No. 24-1.1 - Hat Shaped Channel & (1) 5/8" Type C gypsum

IBC Table 721.1(3), Item No. 25-1.1 - Res. Chan. & (1) 5/8" Type C gypsum

IBC Table 721.1(3), Item No. 26-1.1 - (2) 1/2" Type X gypsum

IBC Table 721.1(3), Item No. 27-1.1 - Res. Chan. & (2) 1/2" Type X gypsum

IBC Table 721.1(3), Item No. 28-1.1 - (1) 5/8" Type C, Hat Shaped Channel, (2) 5/8" Type C gypsum

IBC Table 721.1(3), Item No. 30-1.1 - Res. Chan. & (2) 1/2" Type X gypsum

Details from Gypsum Association GA-600-2021:

(All 1-hour rated for I-joists)

FC 5011 (2) 1/2" Type X gypsum on Res. Chan.

FC 5018 (2) 5/8" Type X gypsum on Res. Chan.

FC 5111 (2) 1/2" Type X gypsum on Res. Chan.

FC 5241 (2) 1/2" Type X gypsum on Res. Chan.

FC 5513 (2) 1/2" Type X gypsum

FC 5522 (2) 1/2" Type X gypsum on Res. Chan.