



Fire-Rated Assembly for Unfinished Ceiling



TRIFORCE®

OPEN JOIST



The fire-rated solution for unfinished ceiling

As concerns grow over fire performance, an increasing number of states are requiring that first floor framing meets the R302.13 - Fire protection of floors of the 2021/2024 International Residential Code® (IRC).

The 2021/2024 IRC versions, accepted by a majority of states, require that unprotected floor/ceiling assemblies exceed a minimum level of fire resistance to address safety concerns. Before now, the cost of achieving this fire resistance has limited builders to expensive options. With TRIFORCE® open joist, builders can now meet both fire performance and quality of floor standards while enjoying an open joist solution.

Based on thorough testing conducted by an approved independent laboratory, and evaluated and found compliant by Uniform ES, TRIFORCE® open joist has demonstrated outstanding fire performance. We are proud to announce that TRIFORCE® open joist has been evaluated for equivalent fire-resistant construction to dimensional lumber or structural composite lumber equal to or greater than 2-inch by 10-inch nominal dimension, in accordance with Exception 4 of Section R302.13 of the 2021/2024 International Residential Code® (equivalent to section R501.3 of the 2012 IRC).

Now builders can again enjoy the benefits of a high quality engineered floor system without costs additions such as drywall ceilings or sprinkler systems.



Uniform ES

Accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC)



See the TRIFORCE® evaluation report at:
https://forms.iapmo.org/ues_reports/EvaluationReports.aspx



TRIFORCE® open joist meets IRC floor fire-protection code for unfinished ceilings

- Trimmable at one end
- Finger jointed - No metal connectors
- Made-to-stock
- And all the benefits of an open joist!



In compliance with Exception 4 to Section R302.13 of the 2021/2024 IRC

TRIFORCE® open joist has been evaluated for equivalent fire-resistant construction to 2-inch-by-10-inch nominal dimension lumber in accordance with Exception 4 to Section R302.13 of the 2021/2024 International Residential Code® (Section R501.3 of the 2012 International Residential Code®), when installed as follow:

1-Floor sheathing:

Materials and installation shall be in accordance with section R503 of the International Residential Code®.

2-TRIFORCE® open joist:

Equivalent performance and qualification as Exception 4 is certified in IAPMO UES ER-539.

3-Trimmmable end protection:

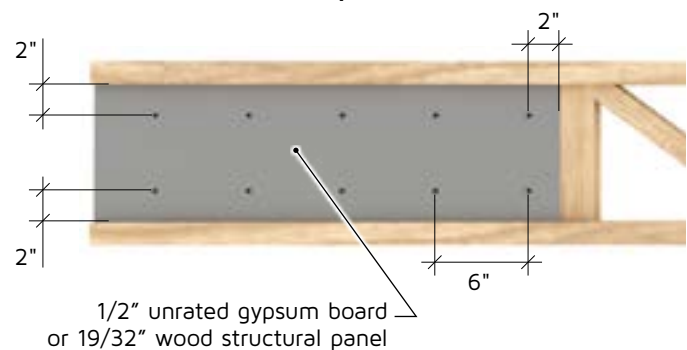
TRIFORCE® open joist to be clad with minimum 1/2" unrated gypsum board or 19/32" wood structural panel fully covering both faces of the 3/8" OSB end panel fastened with 1" nails or screws at 6" o.c. with 2" edge spacing. See Detail A.

3/8" x 1" x 15 or 16 gauge staples may be substituted for nails or screws and shall be installed on both faces with two rows of staples at 6" o.c. with 2" edge spacing.

If cladding cannot be installed using the fastener options above, it may be attached with a 1/4" to 3/8" bead in a «Z pattern» of PL400 structural adhesive (or equivalent) per the manufacturer's instructions.

Detail A:

TRIFORCE® trimmmable end protection



To view the installation in detail, please download the TRIFORCE® Specifier Guide at: www.openjoisttriforce.com/fire-rated

