

Exterior Fire-X® Fire Retardant Treated Wood for Overhang Protection

The International Building Code (IBC) and the International Residential Code (IRC) require projections, such as roof eaves and soffit to be protected based on fire separation distance requirements. The International Building Code (IBC) provides options while the International Residential Code (IRC) has only one method of compliance.

Section 705.2.3 of the IBC permits the use of Type IV construction, *fire-retardant-treated wood* or 1-hr fire-resistance construction for combustible projections. Table R302.1(1) of the IRC only permits the 1-hr fire-resistance construction on the underside. There is no 1-hr. fire-resistance assembly listed for roof eaves. As a result, users of the International Residential Code are looking to the International Building Code to find methods of compliance with the requirement.

International Building Code:¹

705.2.3 Combustible projections. Combustible projections extending to within 5 feet (1.524 m) of the line used to determine the *fire separation distance* shall be of not less than 1-hour *fire-resistance-rated* construction, Type IV construction, *fire-retardant-treated wood* or as required by Section 1406.3.

International Residential Code:²

TABLE R302.1(1)² (extract)
EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Projections	Not allowed	N/A	< 2 feet
	Fire-resistance rated	1 hour on the underside ^{a, b}	> 2 feet to < 5 feet
	Not fire-resistance rated	0 hours	> 5 feet

N/A = Not Applicable.

a. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.

b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

Note: Underside protection of the roof eave is not required when a fire sprinkler system meeting P2904 in the residential code or NFPA 13D is installed (Table R302.1.(2)).

Summary:

A building official is allowed under IRC Section R104.1 and R104.11, to interpret and allow alternative methods of construction to meet the requirements of the building code. *Fire-retardant-treated wood* is an option in the IBC (Section 705.2.3) and is allowed to be substituted for a 1-hr. fire resistant rating in the building code. Therefore, with the consent of the building official, it can be used to satisfy the IRC code requirement.

Visit www.frtw.com to learn more about building code compliant *Pyro-Guard®* Fire Retardant Treated Lumber and Plywood

REFERENCES

[1] International Code Council, Inc. (ICC) (2012) (2015), *International Building Code, 2015*, Falls Church, VA.

[2] International Code Council, Inc. (ICC) (2012) (2015), *International Residential Code, 2015*, Falls Church, VA.