

TECHNICAL BULLETIN

TARGET MARKET ROOFING



Subject: Fire Treated and Pressure Treated Plywood Substrate for Vertical Flashings

23-03

Fire-rated plywood is a type of plywood that has been specially treated with chemicals that create a physical barrier to the spread of flames. This treated wood will char but not oxidize, dramatically reducing the progress and spread of fire in buildings.

FRT plywood treatments are divided into three categories:

1. Exterior grade FRT Plywood
2. Interior Type A FRT Plywood
3. Interior Type B FRT Plywood

A roof deck or flashing substrate typically will be interior Type A because it is not exposed directly to outside elements.

Type B treatments can cause excessive moisture to accumulate in wood, allowing chemicals to react with steel fasteners and connectors. This can also affect adhesion of the flashing membrane.

Fire-retardant-treated wood is defined in Section 2303.2 of the 2006 IBC as “any wood product which, when impregnated with chemicals by a pressure process or other means during manufacture, shall have, when tested in accordance with ASTM E 84, a listed flame-spread index of 25 or less and show no evidence of significant progressive combustion when the test is continued for an additional 20-minute period.

Pressure treated plywood is plywood that has undergone a special pressurized process that increases the wood's durability and makes it less prone to rot, water damage, mold, or insect damage. It basically gives the wood a higher density, making it harder for any of those things to infiltrate. Pressure Treated plywood typically uses a water-born treatment which leaves the wood quite wet, thus can create adhesion issues with adhesives.

Both Fire-retardant-treated wood shall be dried to a moisture content of 19 percent or less for lumber and 15 percent or less for wood structural panels before use.

Sika Corporation's recommendations are as follows:

- Type A or Exterior grade FTR plywood is recommended.
- Adhesion tests shall be performed on any newly installed FTR or pressure treated plywood.
- 48-inch maximum parapet wall height when any treated plywood is being used to adhered flashings to the vertical wall substrate.
- Intermediate bar required at mid-point of wall.

Limitations:

- Any type of FTR plywood could off-gas and affect adhesion of the flashing membrane, therefore, Sika Corporation is not responsible for adhesion issues resulting from off-gassing of the FTR plywood.
- Attachment of the FTR plywood to the substrate is at the discretion of the designer of record.
- SA flashing membrane or SarnaRoof Flashing Adhesive DS 100 is not approved for use with Fire Treated or Pressure Treated plywood.