

Dricon® FS

FIRE RETARDANT
TREATED WOOD

Durable. Reliable. Tested.

ICC ES Dricon® FS has an ICC-ES Evaluation Report 4584. For design professionals that are responsible for ensuring that both safety and structural elements have been addressed, reference ESR 4584.

- Approved application to building codes from 2006 to 2018 for both the IBC and IRC codes.
- ESR 4584 CBC & CRC Supplemental listed approvals:
 - California (Commercial & Residential)
 - Florida (Commercial & Residential)
- Dricon® FS treated wood has been evaluated in accordance with AC66 requirements.
- Dricon® FS treated wood qualifies as an Interior Type A (HT) fire-retardant wood in accordance with the American Wood Protection Association (AWPA) Standard U1, Commodity Specification H, Use Category UCFA.
- Dricon FS fire retardant is a proven successful formulation based on the American Wood Protection Association P50 Standard for Fire Retardants.
- For detailed design and installation instructions, visit dricon.com or see our Dricon® FS Application Guide.

Fire retardant pressure-treated wood offers value to your commercial projects

Fire retardant (FR) pressure-treated wood has been tested for strength, corrosion, fire retardancy, smoke reduction, and for use in high temperature attic space environments.

Benefit of pressure treatment versus coating

- Pressure treatment penetrates into the cell structure of wood while surface treatments may remain on top of the wood.
- Pressure treatment will not chip, peel, flake, or crack; surface treatments may have some or all of these issues.
- Fire retardant treated wood provides fire protection to all 4 sides of the lumber and plywood. Coatings may only cover one side of the lumber or plywood.
- Pressure treatment has been used in constructing FR trusses for many years. Coatings may impede truss plate connections.

©2020 Lonza All information contained herein is based on Lonza Wood Protection's current knowledge. Notwithstanding, you must make your own determination that such information: (i) is suitable for your intended process or purpose; (ii) complies with all applicable laws and regulations; and (iii) will not infringe any third party's intellectual property rights

DRI-2041

Updated 2018 International Building Code — Section 2303.2.2

The use of paints, coatings, stains or other surface treatments is not an approved method of protection as required in this section.

Rigorous testing of Dricon® FS Fire Retardant Treated Wood gives you peace of mind.

Dricon® FS fire retardant treated wood has been tested in accordance with the following procedures:

- ASTM D 3201
- ASTM D 5516
- ASTM D 5664
- ASTM D 6305
- ASTM E 2768
- ASTM E 119
- AWPA U1, UCFA
- AWPA E 12
- UL 723
- ASTM E84 (30-minute test)
- LARR 26119

For a full list of accreditations, visit www.dricon.com

Look for the stamp!

Dricon® FS is required to be stamped. It signifies a code compliant FRT product. Dricon® FS FRTW producers stamp each piece of wood to ensure that your lumber and plywood are treated properly and to the highest standard.

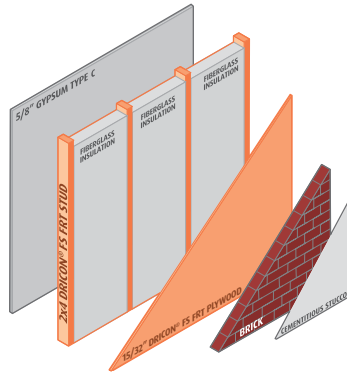
2020	ICC ES	2021
Product Name → DRICON® FS		
Approved Agency → FIRE RETARDANT TREATED PLYWOOD		
Interior Standard → INTERIOR A (HT)		
Product Species → QC MONITORED BY: SPIB / AWPA U1		
Drying Method → SPECIES: XXXX		
Flame Spread → DRYING METHOD: KDAT		
Company Name & Location → FLAMESPREAD <25 SMOKE DEVELOPED <50		
ASTM E84 (EXTENDED) & ASTM E2768		
PLANT LOCATION		
CITY, STATE		

www.Dricon.com

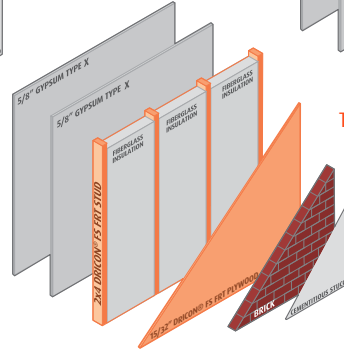
One- and Two-Hour Wood Wall Assemblies

Dricon® FS FRTW has received 1- and 2-hour fire resistance ratings for load-bearing exterior wall assembly. The materials of construction for the assemblies include 1 or 2 layers 5/8 Type C or Type X gypsum, fiberglass insulation, Dricon® FS FRTW studs (2x4), 15/32 inch Dricon® FS FRTW plywood and your choice of exterior finishes.

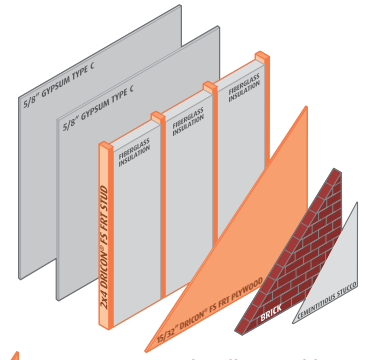
- 2-hour load bearing wall using gypsum Type X
- 2-hour load bearing wall when tested from the interior face and 1-hour rating when tested from the exterior face
- 1-hour load bearing wall tested from the interior face
- 1-hour load bearing wall tested from the exterior face



One-Hour Wood Wall Assembly
(Applicable for interior and exterior face)



Two-Hour Wood Wall Assembly
(Applicable for interior and exterior face)



Two-Hour Wood Wall Assembly
(2hr interior and 1hr exterior face)

Strength Testing

Maximum Loads and Spans for Dricon® FS Fire Retardant Treated Plywood at Service Temperatures up to 170°F (77°C)

Dricon® FS Roof Sheathing

Panel/ Sheathing Thickness	Span Rating for Untreated Roof/ Sub-Floor Sheathing	Maximum Span (In)	Total Allowable Loads (psf)			Dricon® FS Wall or Subfloor Span (In)
			Climate Zone			
			1A	1B	2	
15/32, 1/2	32/16	24	29	42	60	16
19/32, 5/8	40/20	24	49	72	103	20
		32	28	41	58	20
23/32, 3/4	48/24	32	40	59	84	24
		48	18	26	37	24

- All loads are based on two-span condition with strength axis perpendicular to supports.
- Panel edge supports shall be required for roof sheathing. Panel edge clips when used shall be installed as follows: One midway between supports for 24-inch and 32-inch spans, two at 1/3-points between supports for 48-inch spans. Clips must be manufactured for the plywood thickness.
- Fastener size and spacing shall be as required in accordance with the IBC or IRC for untreated plywood of the same thickness.
- For low-sloped or flat roofs with membrane or built-up roofing having a perm rating of less than 0.2; use rigid insulation having a minimum R-value of 4.0 between the sheathing and the roofing, or use the next thicker panel than the tabulated for the span and load (example; 19/32 for 24; 23/32 for 32); and use a continuous ceiling air barrier and vapor retarder with a perm rating of less than 0.2 on the bottom of the roof framing above the ceiling.
- Dricon® FS fire retardant treated plywood must not be used as roof sheathing if a radiant shield is used beneath the roof sheathing.
- The total allowable load is the sum of the live load and dead loads at maximum span. For allowable live loads, subtract dead (assumed to be 8 psf) from the total loads listed.
- The 15/32 and 1/2-inch plywood is limited to 4-ply. 19/32 and 5/8-inch plywood is limited to performance rated 4-ply and 5-ply. 23/32 and 3/4-inch plywood is limited to performance rated 5-ply and 7-ply.
- Uniform load deflection limitations 1/180 of span under live load plus dead load and 1/240 under live load only.
- Subfloor is limited to 100 psf Maximum Load.
- Climate Zone definitions:
 - Zone 1 — Minimum design roof live load or maximum ground snow load ≤ 20 psf (960 Pa)
 - Zone 1A — Southwest Arizona, Southeast Nevada (Area Bounded by Las Vegas-Yuma-Phoenix-Tucson)
 - Zone 1B — All other qualifying areas of the United States
 - Zone 2 — Maximum ground snow load > 20 psi (960 Pa)
- For other load conditions, contact manufacturer.

Strength Design Factors for Dricon® FS FRT Lumber Compared to Untreated Lumber Applicable at Service Temperatures up to 100°F (38°C)

Strength Design Factors	Southern Pine	Douglas Fir	Spruce-Pine-Fir
Bending MOR	0.82	1.00	0.96
Bending MOE	0.87	0.99	0.93
Tension Parallel to Grain	0.98	1.00	0.99
Shear Parallel to Grain	0.95	1.00	1.00
Compression Parallel to Grain	0.96	0.96	0.99
Compression Perpendicular to Grain	0.95	0.95	0.95
Fasteners/Connectors	0.90	0.90	0.90

Strength Design Factors for Dricon® FS FRT Lumber Compared to Untreated Lumber Applicable at Service Temperatures up to 150°F (66°C)

Strength Design Factors	Southern Pine			Douglas Fir			Spruce-Pine-Fir		
	Climate Zone								
	1A	1B	2	1A	1B	2	1A	1B	2
Bending MOR	0.82	0.82	0.82	1.00	1.00	1.00	0.91	0.93	0.95
Bending MOE	0.88	0.88	0.88	1.00	1.00	1.00	0.96	0.96	0.96
Tension Parallel to Grain	0.89	0.93	0.98	1.00	1.00	1.00	0.95	0.97	0.99
Shear Parallel to Grain	0.89	0.93	0.98	1.00	1.00	1.00	0.95	0.97	0.99
Compression Parallel to Grain	0.87	0.91	0.96	0.98	0.98	0.98	0.92	0.94	0.96
Fasteners/Connectors	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90

- Climate Zone definition:
 - Zone 1 — Minimum design roof live load or maximum ground snow load ≤ 20 psf (960 Pa)
 - Zone 1A — Southwest Arizona, Southeast Nevada (area Bounded by Las Vegas-Yuma-Phoenix-Tucson)
 - Zone 1B — All other qualifying areas of the United States
 - Zone 2 — Maximum ground snow load > 20 psf (960 Pa)
- Duration of load adjustments for snow load, 7-day (construction) loads, and wind loads as given in the National Design Specification for Wood Construction® (NOS) also apply.