

Comparison

Comparison of Sheathing Panel Materials

All mechanical values based on 1/2" nominal thickness of material and 16" joist spacing.

Value	DragonBoard	Cement Board	Plywood	Gyp Wallboard	Gyp Sheathing
Flame spread	0	0	High	15	0
Smoke developed	0	0	>50	0	0
Combustibility	Non-comb	Non-comb	Burns	Facing burns	Non-comb
Wt. Lbs./ sq.ft.	2.4	3.0	1.6	1.9	2.4
Insect resistant	Yes	Yes	No	No (paper)	Yes
Mold & mildew resist	Yes	Yes	No	No (paper)	Yes
Distrib. load I/360(psf)	43	22	65	Low	12
Distrib. load I/240(psf)	64	32	90	Low	16
Max. distributed load	760	73	120	Low	65
Water absorption(sat) ¹	<20%	24%	30-40%	disintegrates	Not given
Thermal insulation R	1.2 / in	0.8 / in	1.25 / in	0.9 / in	1.1 / in
Bend radius (min)	7 ft	Flat only	8 ft	10 ft	30 ft
Racking Strength(ult) ²	1840#/ft	Not given	250#/ft	200#/ft	540#/ft

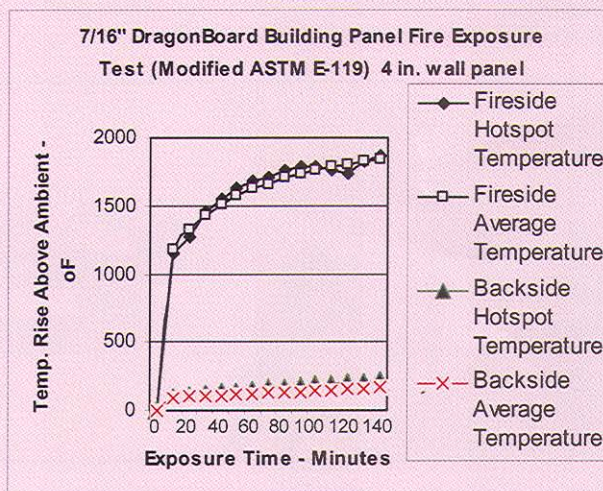
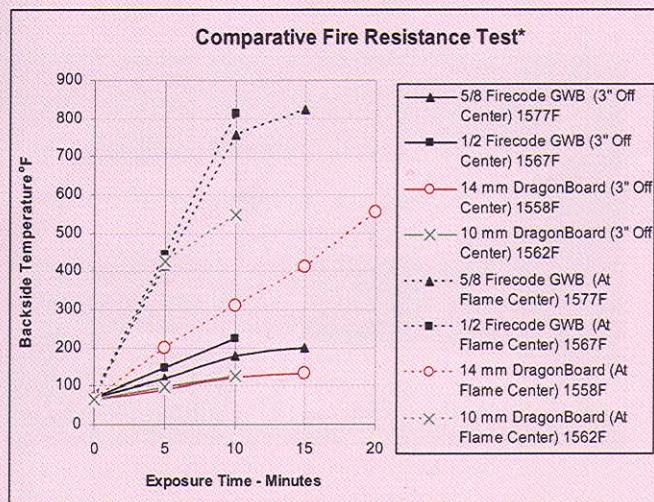
Note 1 – Value after 24 hour immersion. Gyp. wallboard not permitted in exterior application.

Note 2 – Racking strength given is not for design purposes. Use safety factor of at least 4.0.

Pin Puncture Test (2 inch diameter pin)

Time to penetrate under load

Fire Exposure (minutes)	7/16 DragonBoard	1/2 GWB Firecode	9/16 DragonBoard	5/8 GWB Firecode
10 minutes	20# 30 seconds	20# 14 seconds	20# no break 30 seconds	20# no break 30 seconds
15 minutes			20# no break 30 seconds	20# 3 seconds
20 minutes			10# 7 seconds	



Note: 10mm = 7/16", 12mm = 1/2", 14mm = 9/16", 16mm = 5/8"

*Comparative Fire Resistance Test Video is available upon request.