REVOLUTIONARY "SURE-BOARD" SERIES 200S IS THE <u>NON-COMBUSTIBLE</u> FLOOR/ROOF SHEATHING THAT WILL IMPROVE THE FIRE RESISTANCE OF YOUR BUILDING USING STANDARD CONSTRUCTION METHODS AND PRACTICES.

SURE-BOARD® Series 200S

For Floor/Roof Non-Combustible Sheathing

U.S. PATENT #7,770,346

IAPMO ES ER-185 DSA IR A-5 LARR #26040 LA FAB #2109

ROOF FRAMING

- Steel is extended 2" beyond cement board to accomplish horizontal blocking for Series 200S panel
- RR/FJ must be installed at 24" o.c. maximum when installing 3/4" Series 200S-F
- RR must be installed at 16" o.c. maximum when installing 1/2" Series 200S-P

ADDITIONAL CERTIFICATIONS:

SOUND:

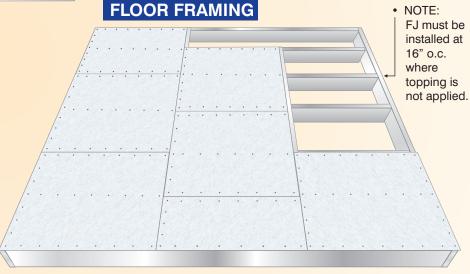
 Improves Sound/Impact Results on Typical CFS Framed Assembly.

FIRE:

 UL Listed Fire Rating using Single Layer of 5/8" Type C Gypsum Test Under ASTM E119 with Applied Load (Assembly yielded over 81 minutes protection.)

SAVINGS TO CONTRACTOR:

- Cost for labor and materials is approximately 20% less than any existing non-combustable sheathing currently available today.
- Panel size is 48" x 48" dimension and can be laid in place by one installer.





SURE-BOARD® SERIES 200S NON-COMBUSTIBLE SHEATHING WILL IMPROVE THE PERFORMANCE OF YOUR CFS STRUCTURE, WHILE REDUCING THE CONSTRUCTION COSTS TO YOU.

SURE-BOARD® IS A CLEAR WINNER.

SURE-BOARD®

IAPMO ES ER-185 LARR #26040 Series 200S Sheathing DSA IR A-5



SURE-BOARD® Series 200S Sheathing

IAPMO ES ER-185 LARR #26040 DSA IR A-5



TABLE 1

NOMINAL DESIGN STRENGTHS FOR SURE-BOARD® SERIES 200S STRUCTURAL PANELS - FLOOR AND ROOF SHEATHING CONTINUOUS OVER TWO OR MORE SPANS

	n Rating, Nominal Strength (PSF)		Allowable Strength (ASD) (psf)	Factored Resistance (LRFD) (psf)	Allowable Concentrated Load, LBF	
24 maxim	um	435	215	260	2,000	

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa, 1 lbf = 4.448 N

- ¹ Maximum allowable strength for panels supported at 24 inches on center is 100 PSF for a deflection limit of L/360.
- ² Panels are capable of supporting an allowable concentrated load of 2,000 lbs. within the deflection limit of L/360 on properly designed and constructed framing members.
- ³ Series 200S panels installed for floors shall include minimum No. 20 gauge (0.033 inch) thick steel sheets. Series 200S panels installed for roofs shall include minimum No. 20 gauge (0.033 inch) thick steel sheets.

SURE-BOARD® Series 200S Sheathing

IAPMO ES ER-185 LARR #26040 DSA IR A-5



NOMINAL SHEAR STRENGTH FOR BLOCKED HORIZONTAL DIAPHRAGMS, LBS/FT SURE-BOARD® SERIES 200S STRUCTURAL PANELS

Screw Spacing, Inches		Nominal	Allowable	Strength, (ASD)	Factored Resistance (LRFD)		
Panel Edge	Field	Strength, (Rn)	Seismic	Wind/All Others	Seismic	Wind/All Others	
2	6	2,770	1,110	1,380	1,660	1,800	
3	6	2,730	1,090	1,360	1,640	1,770	
4	6	1,980	790	990	1,190	1,290	
6	6	1,320	530	660	790	860	

For SI: 1 inch = 25.4 mm. 1 lb/ft = 14.5939 N/mm.

The equation Eq. (1) within the IAPMO Evaluation Report ER-185 shall be used to estimate the mid-span deflection of SURE-BOARD's MgO and fiber-cement simple span diaphragms:

TABLE 3 ALLOWABLE WIND UPLIFT LOADS FOR SURE-BOARD® SERIES 200S STRUCTURAL PANELS1,2

CFS Specifications					Allowable Wind Uplift, (ASD) (psf)			Allowable Wind Uplift, (ASD) (psf)				
					24 (inch) (o.c.), Joist Spacing				16 (inch) (o.c.), Joist Spacing			
					Screw Size			Screw Size				
Thick	nated kness ills	Design Thickness, In.	F _y ksi	F _u ksi	No. 6	No. 8	No. 10	No. 12	No. 6	No. 8	No. 10	No. 12
3	33	0.0346	33	45	30.5	36.2	41.9	47.6	45.8	54.3	62.9	71.5
4	13	0.0451	33	45	39.5	47.2	54.6	62.1	59.3	70.7	81.9	93.2
5	54	0.0566	50	65	63.5	63.5	79.4	79.4	95.3	95.3	119.1	119.1
6	88	0.0713	50	65	63.5	63.5	79.4	79.4	95.3	95.3	119.1	119.1
9	97	0.1017	50	65	63.5	63.5	79.4	79.4	95.3	95.3	119.1	119.1
1	18	0.1242	50	65	63.5	63.5	79.4	79.4	95.3	95.3	119.1	119.1

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psf = 47.88 Pa, 1 psi = 6.89 kPa

- 1 Allowable wind uplift based on screw spacings of 6 inches on center maximum at all panel edges and 12 inches on center maximum in the field/interior of the panels.
- ² If field/interior spacing is reduced from 12 inches on center, wind uplift may be proportionally increased.

Sure-Board® Series 200S FLOOR/ROOF Sheathing Information Table

SURE-BOARD® STANDARDS & SPECIFICATIONS:

The Sure-Board® Series 200S Structural Sheathing Panels laminated with water soluble adhesive to 1/2" / 3/4" fiber cement panels listed under ASTM C1325 and others. The steel sheet is 20 gauge (0.033 inch / 0.838 mm) minimum base-metal thickness complying with ASTM A653 CS/GRAD 33 minimum, and ASTM A1003/A1003M. The sheets are provided with a G-40 hot dipped galvanized coating conforming to ASTM A924.

SERIES 200S-F FLOOR SHEATHING:

3/4" Thick Fiber Cement Sheathing is laminated to 20 gauge (0.033 inch / 0.838 mm) steel sheet for use as typical floor sheathing with framing members at 24" o.c. maximum spacing. Note: 16" o.c. maximum where topping is not applied.

SERIES 200S-P ROOF SHEATHING:

1/2" Thick Fiber Cement Sheathing is laminated to 20 gauge (0.033 inch / 0.838 mm) steel sheet for use as typical roof sheathing with framing members at 16" o.c. maximum spacing.

Both floor and roof sheathing are manufactured in 48" x 48" panels for easy installation.

FASTENERS SPECIFICATIONS:

Fasteners to attach the Sure-Board® Series 200S panels to CFS members are self drilling/self tapping pilot point bugle head screws, #8 x 1 5/8" long winged driller by grabber super drive LOX drive screws or equal. Screws must have cutting nubs under screw head to seat into fiber cement sheathing properly.

DESIGN OF FLOOR/ROOF SYSTEM:

All floor and roof members and the installation of these members are responsibility of EOR and contractors.

IAPMO ES ER-185 Series 200S

Sure-Board®

Expanding Your Solutions www.cemcosteel.com

Corporate Offices & Main Production Plant 263 N. Covina Lane • City of Industry, CA 91744 (800) 775-2362 • Fax (626) 330-7598

Technical Support:

support@sureboard.com Toll Free: (866) 469-7432

Northern California Manufacturing Facility 1001-A Pittsburg Antioch Hwy. • Pittsburg, CA 94565 (925) 473-9340 • Fax (925) 473-9341

Visit www.sureboard.com and www.floorsheathing.com

Denver Manufacturing Facility 490 Osage Street • Denver, CO 80204 (303) 572-3626 • Fax (303) 572-3627