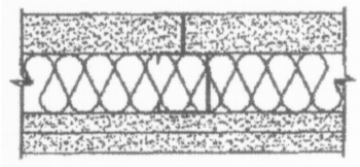
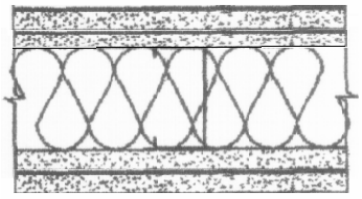
DragonBoard 4 Hour Fire Designs

Shaft Wall with 2-1/2" Steel C-T Stud
DB Design No. WP 2401



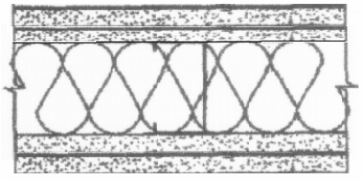
<u>One layer</u> 1" x 24" type X gypsum panels inserted between 2-1/2" floor and ceiling runners with T section of 2-1/2" steel C-T studs between panels.
<u>Opposite side: Base layer</u> 14 mm (9/16") DragonBoard applied at right angles to studs using 1-3/4" self-drilling self-countersinking corrosion protected hi-lo cement board screws spaced 24" o.c. <u>Face layer</u> 14 mm (9/16") DragonBoard applied parallel to studs with 2" cement board screws 12" o.c. Joints finished using fiberglass tape. Screw heads covered. Use 3M CP25WB+ or equal for Caulking. 2-1/2" 8pcf mineral wool insulation for fire. (Under design evaluation)

Exterior Wall with 4" Steel Stud
DB Design No. WP 3402



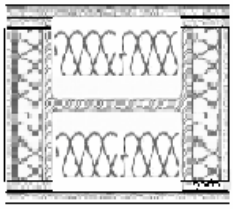
<u>Base layer</u> 14 mm (9/16") DragonBoard applied parallel to each side of 4" 20 gage steel studs 16" o.c. using 1-3/4" self-drilling self-countersinking corrosion protected cement board screws spaced 12" o.c. <u>Face layer</u> 14 mm (9/16") DragonBoard applied to each side at right angle with 1-7/8" cement board screws 8" o.c. Joints are offset from base layer joints. Use 3M CP25WB+ or equal for Caulking. 4" 8pcf mineral wool insulation for fire. All joints taped and fasteners finished. Use 3M CP25WB+ or equal for Caulking. (As tested at Omega Point Laboratories)

Exterior Wall with 2-5/8" Steel Stud
DB Design No. WP 3404



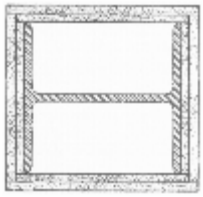
<u>Base layer</u> 14 mm (9/16") DragonBoard applied parallel to each side of 4" 20 gage steel studs 16" o.c. using 1-3/4" self-drilling self-countersinking corrosion protected cement board screws spaced 12" o.c. <u>Face layer</u> 14 mm (9/16") DragonBoard applied to each side at right angle with 1-7/8" cement board screws 8" o.c. Joints are offset from base layer joints. Use 3M CP25WB+ or equal for Caulking. 2-1/2" 8pcf mineral wool insulation for fire. All joints taped and fasteners finished. Use 3M CP25WB+ or equal for Caulking. (Under design evaluation)

Column W10x49 with Metal Corner Bead
DB Design No. CM 6401



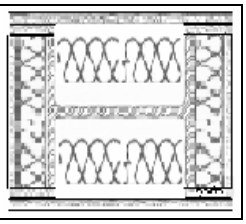
***Base layer** 14 mm (9/16") DragonBoard applied to flanges of W10x49 and fastened to 1-5/8" steel studs with 1-3/4" self-drilling self-countersinking corrosion protected cement board screws 24" o.c. **Face layer** 14 mm (9/16") DragonBoard applied to studs over flanges with 1-3/4" cement board screws 12" o.c. to provide a cavity between boards on the flange. Friction fit 1-1/2" 8 pcf mineral wool. **Face layer** 14 mm (9/16") DragonBoard across the web opening and attached to studs on top of the 2-1/2" wide DragonBoard furring strips with 1-3/4" cement board screws 12" o.c. Friction fit 4" 8pcf mineral wool to the cavity. Metal corner bead applied with 1-7/8" cement board screws 12" o.c. (Under design evaluation)*

Column W10x49 with Steel Column Cover
DB Design No. CM 6402



***Base layer** 14 mm (9/16") DragonBoard applied around W10x49 column and held in place with paper masking tape. **Second layer** 14 mm (9/16") DragonBoard applied around column and held in place with paper masking tape. **Face layer** either No. 24 MSG stainless steel column cover consisting or two L-shaped sections with snap-lock sheet steel joints or No. 22 MSG stainless steel column covers consisting of two L-shaped sections with lap joints fastened with No. 8x1/2" sheet metal screws 12" o.c. (Under design evaluation)*

Column W14x228 with Metal Corner Bead
DB Design No. CM 6403



***One layer** 14 mm (9/16") DragonBoard applied to 2-5/8" steel studs over flanges of heavy steel W14x228 column with 1-3/4" self-drilling self-countersinking corrosion protected cement board screws 12" o.c. to provide a cavity between DragonBoard and flange. Friction fit 1-1/2" 8 pcf mineral wool. **One layer** of 14 mm (9/16") DragonBoard applied across the web opening and attached to studs on top of the 3-1/2" wide DragonBoard furring strips with 1-3/4" cement board screw 12" o.c. Friction fit 4" 8pcf mineral wool to the cavity. Metal corner bead applied with 1-7/8" cement board screw 12" o.c. (Under design evaluation)*