

FIBERBOARD SHEATHING

HELPS BUILD STRONG, ENERGY-EFFICIENT WALLS, ECONOMICALLY

Provides Corner Bracing

No supplementary corner bracing is required by the model building codes when structural grade fiberboard sheathing panels, 1/2" or 25/32", are applied vertically or horizontally.

Ideal for Any Siding

Fiberboard sheathing is easy and economical to install with hardboard, wood, or any other siding material. And, there is no fear of crushing when staples or nails are driven securely.

Durable

Fiberboard sheathing withstands the wear and tear involved in handling prefabricated wall sections. And, because it doesn't break easily, there is less waste. Fiberboard sheathing is not adversely affected by inclement weather or sunlight.

Insulates

Fiberboard sheathing's insulating properties help save energy and money.

Reduces Noise

Fiberboard offers more sound transmission resistance than most sheathing materials. When used with sound-deadening board and gypsum wallboard, outside walls become excellent sound barriers against outdoor noise.

Controls Vapor

Fiberboard sheathing is water repellent, forms a weather-tight cover for walls, and eliminates the need for building paper with most sidings. Fiberboard sheathing's high permeance also permits unwanted vapor to escape outward through sidewalls – one of the few sheathing products available with this permeance advantage.

Applies Easily

Fiberboard sheathing offers rapid and efficient application with nails or staples.

INSTALLATION INSTRUCTIONS

Structural Sheathing, 1/2" regular and 1/2" and 25/32", can provide racking strength when applied over studs 16" O.C., and nailed as described in the application portion of these instructions. However, specific racking resistance requirements will be determined by local building codes. Consult your local building code for building paper and vapor retarder requirements.

SIZES

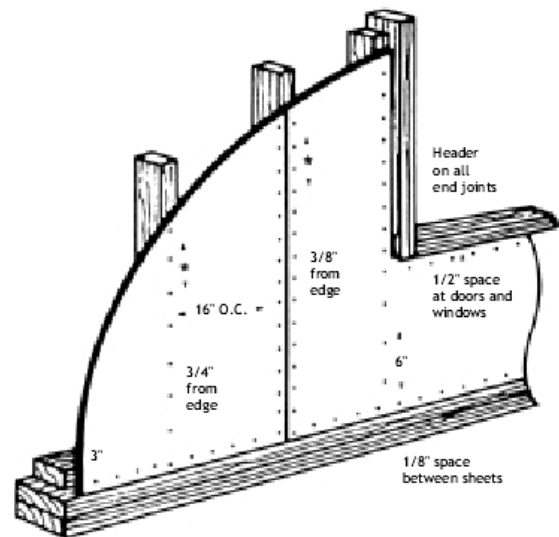
Regular sheathing is available in nominal 1/2" x 4' x 8', 4' x 9', and 4' x 10' square edge sheets. Structural sheathing is available in nominal 1/2" and 25/32" thickness and 4' x 8' and 4' x 9' square edge.

PRODUCT STANDARDS

Applicable product standards are ANSI/AHA A194.1 or ASTM C208.

APPLICATION

Sheathing should be applied vertically with the long edges parallel to the vertical studs. Center all joints over the framing members with a 1/8" gap between edges. Leave a 1/2" gap at the doors and windows. Sheathing should extend from sill to top plate. If not, headers for adequate nailing should be provided at all horizontal joints. Horizontal application is allowed if blocking is provided at all horizontal joints.



* Each 4' x 8' panel requires approximately 118 nails. See TABLE 3 for proper edge fastener spacing.

TABLE 1

PROPERTIES	Typical R-value*	Vapor Permeance (perms)
1/2" Regular	1.32	5.0 ave. min.
1/2" Structural	1.22	5.0 ave. min.
25/32" Structural	2.06	5.0 ave. min.

* The higher the R-value, the greater the insulating power

TABLE 2 For non-structural applications, the following fastening chart should be used.

SHEATHING	Fastener Size	SPACING	
		Edges	Field
1/2" Regular	1-3/4" nail**	6"	12"
1/2" Structural	1-3/4" nail**	6"	12"
25/32" Structural	2" nail**	6"	12"

** See local building code. Staples may be used in lieu of nails.

TABLE 3 For structural applications, use the following fastening chart to take advantage of shear values for sheathing.

Allowable Working Shear Stress for Wind or Seismic Forces on Vertical Shear Walls with Fiberboard Sheathing ^{1,2,3,4,5}

Thickness & Grade	Fastener Type	Shear Stress (plf of wall) Perimeter Spacing ⁴		
		2"	3"	4"
1/2" Regular	Consult Sheathing Manufacturer	Consult Sheathing Manufacturer		
1/2" Structural	8d common nail or 11 ga. galv. roofing nail, 1-1/2" long, 7/16" head	260	230	170
	7/16" crown, 16 ga. galv. staple, 1-1/8" leg	225	200	150
	1" crown, 16 ga. galv. staple, 1-1/8" leg	340	300	230
25/32" Structural	8d common nail or 11 ga. galv. roofing nail, 1-3/4" long, 7/16" head	270	240	180
	7/16" crown, 16 ga. galv. staple, 1-1/2" leg	220	200	150
	1" crown, 16 ga. galv. staple, 1-1/2" leg	325	290	220

1. All panel edges shall be backed with 2" or wider framing of Douglas Fir, Larch or Southern Pine. 2. Fiberboard sheathing diaphragms shall not be used to brace concrete or masonry walls. 3. Fiberboard sheathing on one side only. 4. Fasteners spaced every 6" in the field. 5. Safety factor used was 2.8.

DETAILS

Variations can be adapted from these basic wall systems.

Fig. A – STC 49* steel studs 24" O.C.

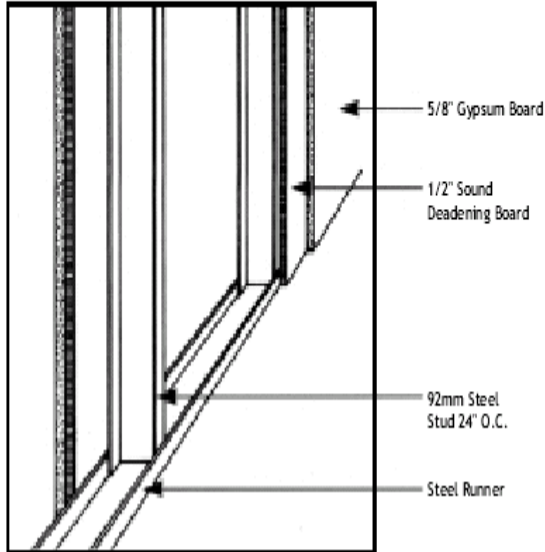


Fig. C – STC 56* 2" x 4" studs staggered 24" O.C.

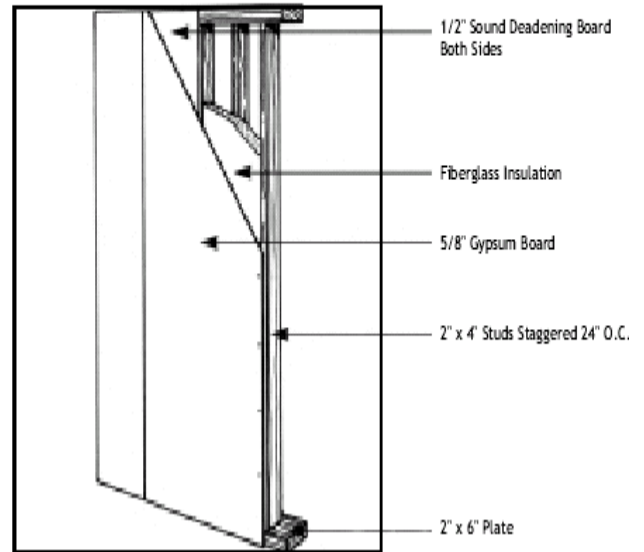
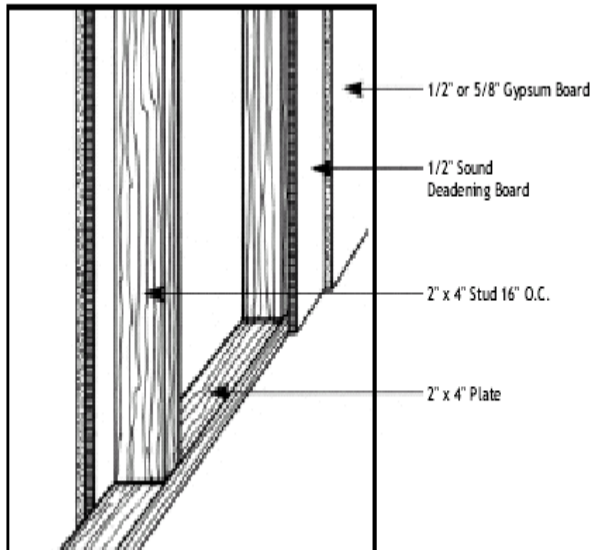


Fig. B – STC 39* 2" x 4" studs 16" O.C.



*Contact AFA for actual test results