



WALLTUF[®]

PLASTIC PANELS

Installation Guide

PRODUCT DESCRIPTION

Fiberglass-free WALLTUF™ panels are waterproof, stain & chemical resistant. WALLTUF complies with ASTM E-84 Class III, USDA, California's "Proposition 65" and the Canadian Food Inspection Agency (CFIA) requirements.

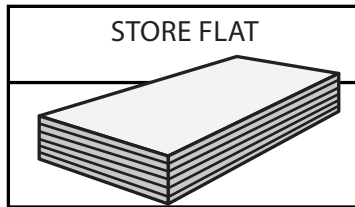
WALLTUF is the same material all the way through. The front side is embossed to enhance durability. The smooth back side is treated to accept waterbased adhesives. WALLTUF panels are designed to install with trowel grade latex adhesive over structurally sound solid interior walls, such as drywall or plywood. When installed with caulked moldings, WALLTUF panels form a moisture resistant, sanitary, low maintenance wall surface.

GENERAL INSTRUCTIONS

The following general instructions are for installing WALLTUF panels. This guide will help you select the other materials necessary for a successful installation. Always follow all adhesive, sealant and fastener manufacturer's instructions carefully.

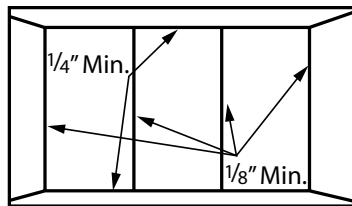
STORAGE AND CONDITIONING

Panels must be stored flat on a smooth, dry surface. Before installation, allow panels to come to room temperature. Install panels at the temperature typical for the area after construction is finished.

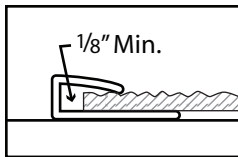


ALLOWING FOR MOVEMENT

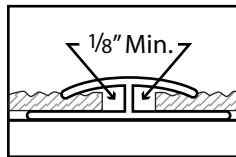
WALLTUF panels expand and contract with temperature changes. Space panels as shown. Do not use in structures subjected to extreme temperature changes, such as RV, Boat, and trailer interiors.



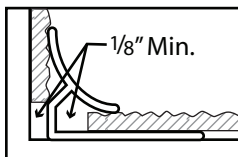
IMPORTANT! LEAVE A MINIMUM OF 1/8" BETWEEN AND 1/4" AT THE TOP AND BOTTOM OF EACH PANEL.



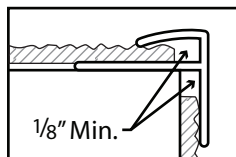
CAP OR END CAP



DIVIDER OR DIVISION BAR



INSIDE CORNER



OUTSIDE CORNER

CUTTING & FITTING MOULDINGS

PVC mouldings are available for WALLTUF to facilitate installation. Mouldings can be cut with razor knife, fine toothed saw or metal shears. Do not fit panels too tightly in moldings. Allow at least 1/8" in all channels for panel expansion after installation is completed. For a watertight installation, a continuous bead of sealant must be run in all molding channels and mating flanges. Moldings should surround all edges of every panel. Excess sealant "squeeze out" can be cleaned off while fresh.

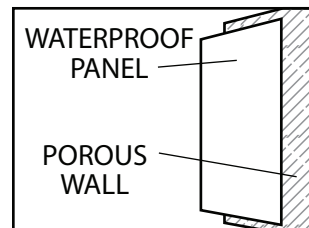
SURFACE PREPARATION & LAYOUT

Insure that walls are flat, clean, dry, and solid. Remove or sand through all waterproof surfaces. Remove all bumps, loose plaster or paint and dust. Fill all low spots and voids. Concrete block walls may require a leveling coat. Plan where the panel edges will meet, avoiding placement directly over drywall or plywood joints. Decide where to install the first panel and the best direction to work.

CUTTING & FITTING PANELS

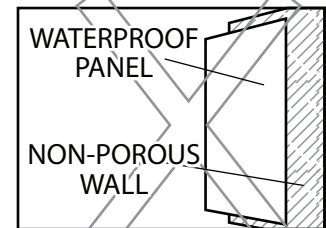
Unlike other panels, WALLTUF panels contain no fiberglass or other irritants. They can be scored and snapped similar to drywall and cut with sheet metal shears. If sawing, use a fine toothed blade. Cut-outs such as for switches should be drilled at the corners to distribute stress. Test the panel fit by placing it in position without adhesive. Be careful to leave appropriate gap at panel edges. Do not fit panels too tightly in mouldings.

RIGHT



Such as drywall, plywood, wood composite panels, unsealed concrete.

WRONG



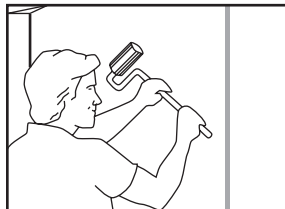
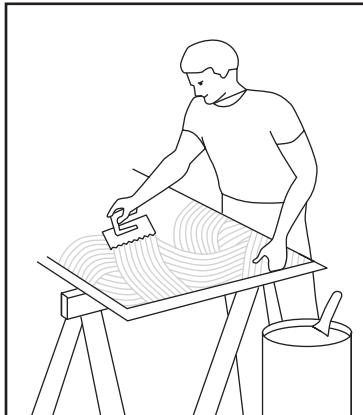
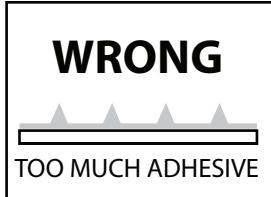
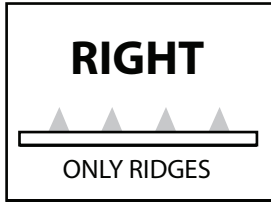
Such as plastic panels, metal panels, sealed concrete.

PANEL ADHESIVES

WALLTUF panels should be installed with a quality trowel grade non-flammable or latex based panel or construction adhesive listed in the chart on the reverse side. NOTE: The water-borne family of adhesives, including latex and non-flammable based formulas, will not bond two impervious surfaces to each other. Because WALLTUF panels are impervious to moisture, the wall being covered must be porous enough to allow for adhesive drying. Wall finishes that are moisture proof must be removed or otherwise prepared to insure that there is adequate adhesive curing. **Always follow adhesive manufacturer's directions completely.**

APPLYING ADHESIVE

Spread adhesive over the entire back of the panel following manufacturer's directions for trowel notch size and working temperature. Press spreader so that teeth touch panel. Leave only ridges of adhesive on the panel. Be sure to spread the adhesive on the panel, not the wall.

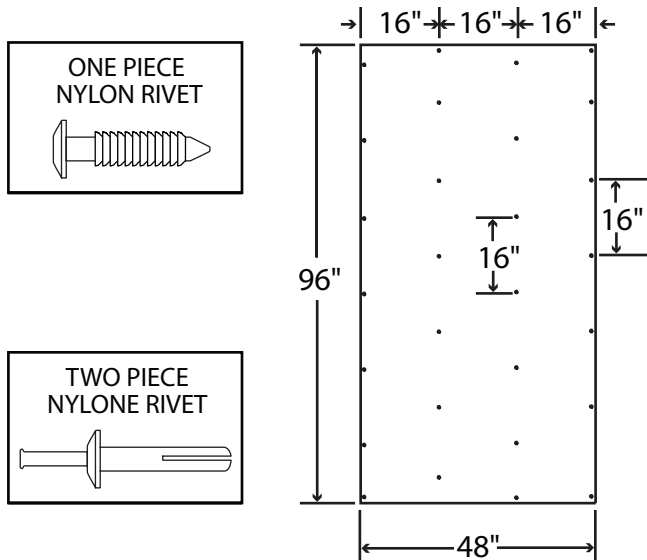


APPLYING THE PANEL

Position the panel and press against the wall. Take care to insure that the panels are not fitted too tightly. Use a laminate roller over the entire surface of the panels to ensure that there is even and complete adhesive contact with the wall at all points. Remove fresh adhesive and/or caulk.

MECHANICAL FASTENERS

Mechanical fasteners such as nylon drive rivets may be used in addition to adhesive. Install mechanical fasteners starting from the center of panel. Work systematically outwards, securing the perimeter last. Arrange fasteners on 16" centers with outer fasteners placed about 1" from panel edges. At panel seams, fasteners should be staggered to insure a flat seam.



RECOMMENDED ADHESIVES		
<i>Tested & Rated by Manufacturer</i>		
Non-Flammable Adhesives	Mfg. Phone #	Rating (0-4)
Henry #444 FRP Panel Adhesive	800-232-7832	4.0
Liquid Nails FRP #310 Latex FRP Adhesive	800-634-0015	3.5
Franklin Titebond Fast Grab FRP	800-877-4583	2.0
OSI Sealants, Inc. Pro Series FRP-555	800-321-3578	2.0
PL Latex FRP	800-321-0253	2.0
TACC / Miracle FRP Adhesive	800-503-6991	1.5
NOT RECOMMENDED / NOT COMPATIBLE		
ALL SOLVENT BASED AND ALL TUBE STYLE ADHESIVES		
DAP Durabond FRP Panel Adhesive		
Foster #97-37 by H.B. Fuller		

Cleaning and Maintenance

After installation panels may be cleaned with non-abrasive all purpose cleaners or soaps. For difficult stains such as felt marker or graphite, use Mineral Spirits or Acetone sparingly. Labels can be soaked off with penetrating oil such as WD-40.

THIS TECHNICAL BULLETIN IS FOR THE APPLICATION OF WALLTUF NRP BRAND WALL PANELS UNDER NORMAL CONDITIONS OF INSTALLATION. THE RECOMMENDATIONS PROVIDED IN THE BULLETIN REPRESENT OUR BEST JUDGMENT BASED ON OUR EXPERIENCE WITH NORMAL APPLICATIONS. INFORMATION HEREIN IS OFFERED WITHOUT CHARGE OR OBLIGATION, AND IS ACCEPTED AT RECIPIENT'S SOLE RISK. BECAUSE CONDITIONS OF USE MAY VARY AND ARE BEYOND OUR KNOWLEDGE AND CONTROL, THE MANUFACTURER MAKES NO REPRESENTATION ABOUT, AND IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR RELIABILITY OF DATA, NOR FOR TOXICOLOGICAL EFFECT OR INDUSTRIAL HYGIENE REQUIREMENTS ASSOCIATED WITH PARTICULAR USES OF ANY PRODUCT OR PROCESS DESCRIBE HEREIN. THE MANUFACTURER REQUESTS THAT CUSTOMERS INSPECT AND TEST OUR PRODUCTS BEFORE USE AND SATISFY THEMSELVES AS TO CONTENTS AND SUITABILITY.



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