Acrytec PANEL INDUSTRIES

Installation Guide:

Acrylinea Insulated System (Non-Combustible Construction)

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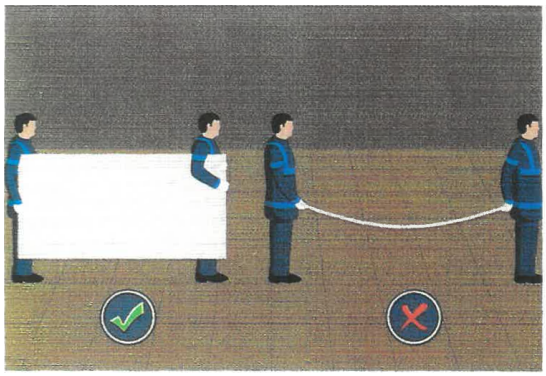
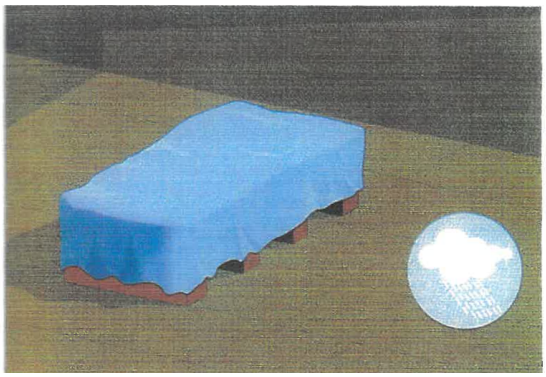
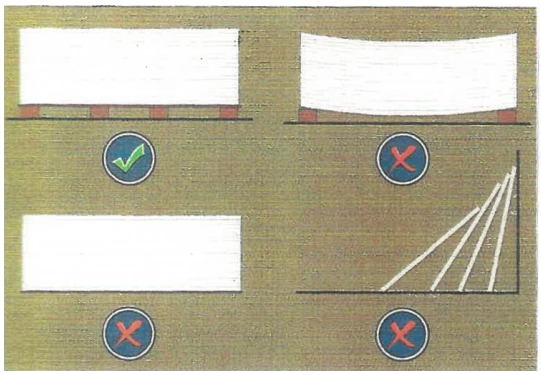
Any unique on site details that are not addressed in this installation guide must be brought to the General Contractor's attention.

Proper Storage and Handling

- Ensure panels are stacked on flat surface **(Do not stack skids)**
- Keep panels protected from elements at all times
- Carry panels in an upright position
- Do not carry panels flat from either end
- **Do not drop or hit edges of panels**
- **Do not rest panel on corners**
- **Do not allow panels to sag when lifting**
- Exercise caution when handling channels and panels by using proper protective equipment







NOTE: Use only Acrytec materials and components for installation of Acrytec Systems. Installers must be certified and trained by Acrytec Panel Industries.

Silica Warning

DANGER: May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading finer cement, and when cleaning up, disposing

of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with OSHA standard for silica dust and or/ other applicable law, (2) follow proper cutting instructions to reduce or limit the release of dust, (3) warn others in the area to avoid breathing the dust, (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment, and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

Suitable Substrates

- Poured concrete
- Structural concrete block
- Wood studs with sheathing
- Structural metal studs with sheathing
- Existing substrates (Note: Substrates are to be inspected for sound structural integrity and approved by a certified project engineer)

Materials

- Moisture/vapour barrier: Not supplied by Acrytec Panel Industries
- Mounting channels: Galvanized 18 gauge steel Z girt (not supplied by Acrytec) horizontally spaced at 600mm and Acry-channels (supplied by Acrytec) spaced vertically at 400mm
- Insulation: Type and thickness as noted on drawings
- Non-combustible Acrytec panels
- Adhesive: One component, moisture curing, polyurethane 3M 540 or Vulkem 116
- Sealant: Willseal 600 pre-compressed polyurethane foam sealant
- Fasteners (for panel to channel): Stainless Steel Ribbed Wafer-Head No.8 (9.5mm x 31.8mm)

Note: Fasteners are to be installed beneath overlap.

- Fasteners (for Z girt to substrate): Engineer approved

- Fasteners (for channel to Z girt): 3/16” industrial stainless steel rivets or #14 x 1-1/4” stainless steel self tappers

- Vertical joint flashing sheet

Flashing

All flashings must be installed as per Acrytec details, unless otherwise noted in shop drawings.

Moisture Barrier

Moisture and vapour barrier materials must be installed as per local building code requirements and manufacturer’s specifications.

How to Install Acry-Channels & Components

Substrate surface preparation must meet acceptable building standards and be free of any obstructions, straight and uniform.

The substrate must also be capable of handling load requirements for Acrytec systems.

1) Horizontally install Z girts to structurally sound substrate or studs at 600mm apart using engineer approved stainless steel mechanical fasteners (use approximately 5 fasteners per Z girt).
2) Install specified insulation tightly between Z girts.
3) Vertically install channels 400mm apart using 3/16” industrial stainless steel rivets or #14 x 1-1/4” stainless steel self tappers.
4) Maintain a 5mm gap for expansion between all channels all Z girts.
   Note: Shims for levelling may be used between Z girts and channels if required.
5) Incorporate expansion joint details where required.
6) Vertical channels should not span between floors.

Installation of Acrylinea

Note: Keep finished face down when cutting panels.

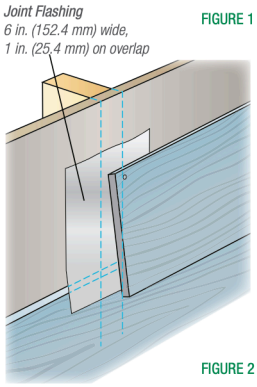


FIGURE 1



FIGURE 2

- Refinish panel edges where cutting was required. Dust from cutting must be removed before the panel is installed.
- Install Willseal 600 pre-compressed polyurethane foam sealant around doors, windows, and other dissimilar materials.
- Install Acrylinea to the channels using specified fasteners and adhesive.
- Acrylinea should not span between floors.
- Maintain a 2mm gap between vertical butt joints and other dissimilar materials, and a 5mm gap between horizontal lap joints.
- When installing Acrylinea in a staggered pattern, joint flashing must be used behind each vertical joint, as shown in Figure 1.
- When installing Acrylinea in a vertically stacked pattern, apply a continuous strip of Willseal 600 along each side of the stack. This is done in place of joint flashing.
- Mechanical fasteners are to be spaced at 400mm O.C.
- Space mechanical fasteners 25mm from side edge of panel and 20mm from top edge of panel.
- Apply 5” long beads of adhesive directly above fasteners. Specified adhesive must be used in conjunction with mechanical fasteners on all Acrylinea panels.

Sealants

Willseal 600 pre-compressed polyurethane foam sealant

- Remove adhesive backing from sealant before applying.
- Do not stretch sealant while applying.
- Slightly compress new roll of sealant to previously applied end.

Post-Installation Precautions

Dust and debris should be removed from panels immediately after installation.