



Installation Guide:

Quartz Board System

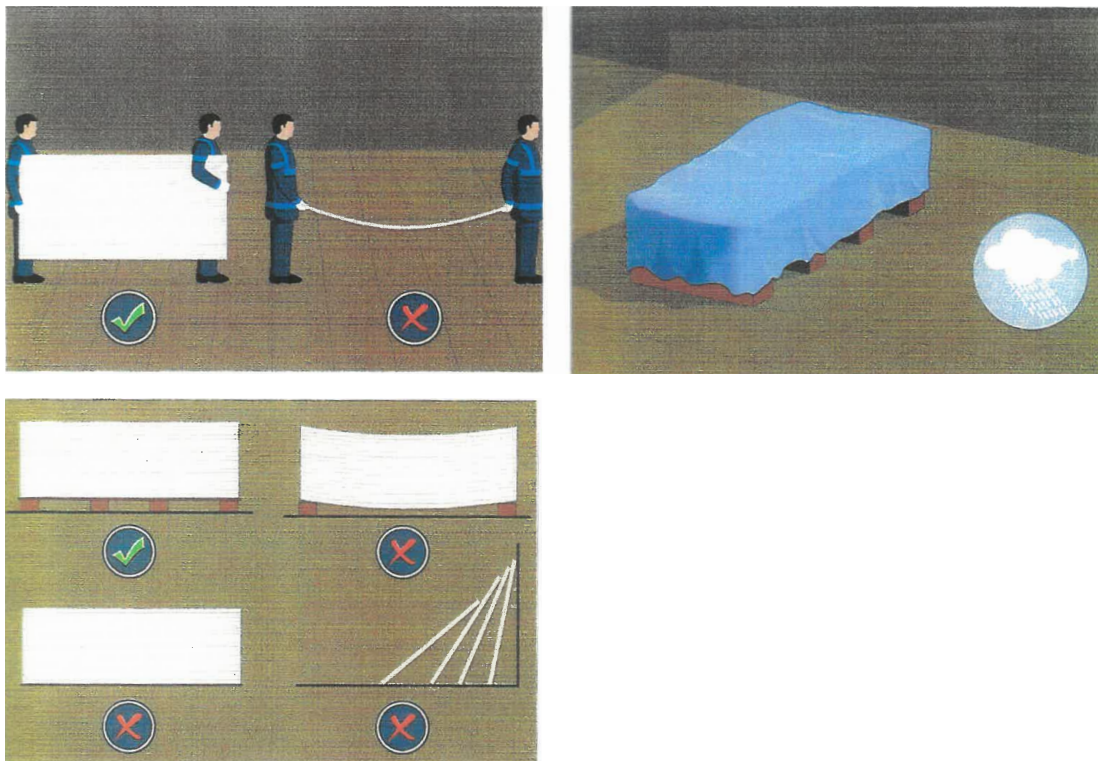
Table of Contents

INSTALLATION GUIDE: QUARTZ BOARD SYSTEM	1
PROPER STORAGE AND HANDLING	3
SILICA WARNING	3
SUITABLE SUBSTRATES	4
MATERIALS	4
FLASHING	5
MOISTURE BARRIER	5
HOW TO INSTALL WOOD STRAPPING/METAL CHANNELS & COMPONENTS	5
INSTALLATION OF QUARTZ BOARD	6
CONCEALING FASTENERS	7
SEALANTS	7
POST-INSTALLATION PRECAUTIONS	7

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 fibre 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

For Combustible Construction:

- Moisture/vapour barrier: Not supplied by Acrytec
- Wood strapping: 1" x 4" (Not supplied by Acrytec)
- Fasteners (for wood strapping to wood strapping): #10 x 1-1/2" stainless steel wood screws
- Fasteners (for panel to wood strapping): 15 gauge stainless steel brad nails or #10 x 1-1/4" stainless steel screws (custom powder coated)
- Fasteners (for wood strapping to substrate): Engineer approved
- Panel to wood strapping adhesive: One component, moisture curing, polyurethane 3M 540 or Vulkem 116
- Optional Non-Combustible Insulation: Type and thickness as noted on drawings (Not supplied by Acrytec)
- Non-combustible Acrytec panels
- Joint Sealant: Willseal 600 pre-compressed polyurethane foam sealant
- Panel Concealing Filler: Matching acrylic material for countersunk and concealed nails, and site cut panel edges
- Flashing: Not supplied by Acrytec

For Non-Combustible Construction:

- Moisture/vapour barrier: Not supplied by Acrytec
- Z girts: Galvanized 18 gauge steel, G-90 coating thickness to CAN/CSA G164-M, depth as indicated on shop drawings (Not supplied by Acrytec)
- Horizontal channels: Galvanized 20 gauge Acry-channels
- Optional Non-Combustible Insulation: Type and thickness as noted on drawings (Not supplied by Acrytec)
- Non-combustible Acrytec panels
- Panel to channel adhesive: One component, moisture curing, polyurethane 3M 540 or Vulkem 116
- Fasteners (for panel to horizontal channels): #10 x 1-1/4" stainless steel screws (custom powder coated) or 15 gauge stainless steel brad nails
- Fasteners (for Z girt to substrate): Engineer approved
- Fasteners (for horizontal channels to Z girt): 3/16" industrial stainless steel rivets or #14 x 1-1/4" stainless steel self tappers
- Joint Sealant: Willseal 600 pre-compressed polyurethane foam sealant
- Panel Concealing Filler: Matching acrylic material for countersunk and concealed screw fasteners, and site cut panel edges

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 Wood Strapping/Metal 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.

For Combustible Construction:

- If insulation is required, fasten extruded polystyrene rigid insulation or

Rockwool Comfortboard 110 over substrate.

Note: Before installing the insulation, make note of stud locations.

- Vertically install 1" x 4" wood strapping to structurally sound studs/ substrate at 400mm apart using engineer specified stainless steel mechanical fasteners (use approximately 5 fasteners per wood strap). Maintain a 5mm gap between wood strapping.

Note: Shims for levelling may be used.

- Install horizontal wood strapping over vertical wood strapping at 400mm O.C. using #10 x 1-1/2" stainless steel wood screws. Maintain a 5mm gap between wood strapping.
- Incorporate expansion joint details where required.
- Vertical strapping should not span between floors.

For Non-Combustible Construction:

- Establish termination points and install 18 gauge galvanized Z girts vertically every 400mm with engineer specified fasteners to every vertical stud. Use approximately 5 fasteners per Z girt. Maintain a 5mm gap for expansion between all Z girts.

- Install insulation between Z girts tightly if required.

Note: Thickness of insulation must be 1" below top of Z girt to allow for ventilation within the wall cavity.

- Horizontally install Acry-channels to Z girts using 3/16" industrial stainless steel rivets or #14 x 1-1/4" stainless steel self tappers. Space channels no greater than 400mm apart. Maintain a 5mm gap for expansion between all channels and all Z girts.

Note: Shims for levelling may be used.

- Incorporate expansion joint details where required.
- Vertical Z girts should not span between floors.

Installation of Quartz Board

Note: Keep finished face down when cutting panels.

- Refinish panel edges where cutting was required. Dust from cutting must be removed before the panel is installed.
- Install panel to the wood strapping/channels using appropriate size and type of mechanical fasteners.
- Panels should not span between floors.
- Mechanical fasteners are to be spaced at 400mm vertically.
- Specified adhesive must be used in conjunction with mechanical fasteners on all panels. Apply 5" continuous beads on all channels.

- Pre drilling all panels before the installation of each mechanical fastener is recommended when using exposed powder coated screws. Remove panel dust created from drilling immediately.

Note: No pre drilling is required if using 15 gauge stainless steel brad nails.

- Space mechanical fasteners 20mm from panel edges and centred in the middle of the panel.
- Install Willseal 600 pre-compressed polyurethane foam sealant in between all panels and dissimilar materials where possible.

Concealing Fasteners

Note: Concealing is only applicable when using 15 gauge brad nails.

EXTREMELY IMPORTANT:

- A. Prior to concealing screw holes, ensure panel surface is flat and clean.
- B. Mix material in container prior to use.
Note: Do not add water to the mixture. Do not let material freeze during storage.
- C. Using supplied Acrytec material, fill the fastener cavity. Do not exceed the size of the nail hole diameter.
- D. Remove excess material to ensure a flat surface.

Do not apply concealing material below 5° C for at least 24 hours in dry weather.

Sealants

Willseal 600 pre-compressed polyurethane foam sealant

- Remove adhesive backing from sealant before applying to panel edge.
- 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.