



Installation Guide:

Nvelope NV1 System (Non-Combustible Construction)

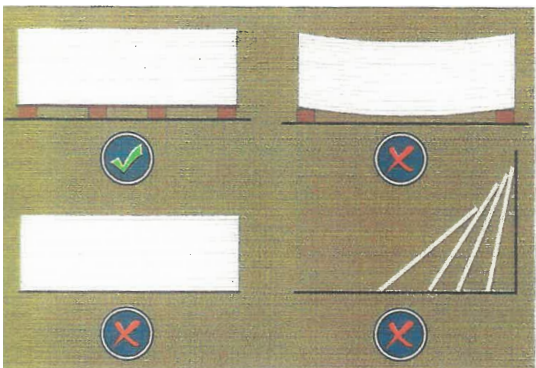
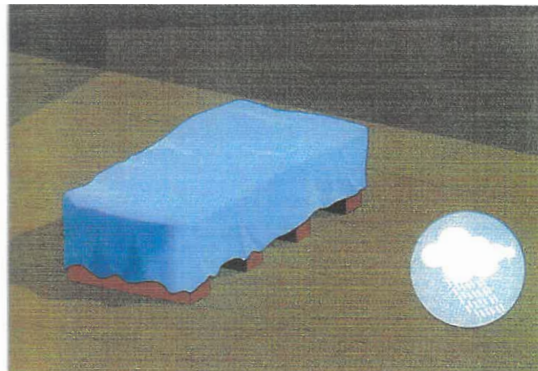
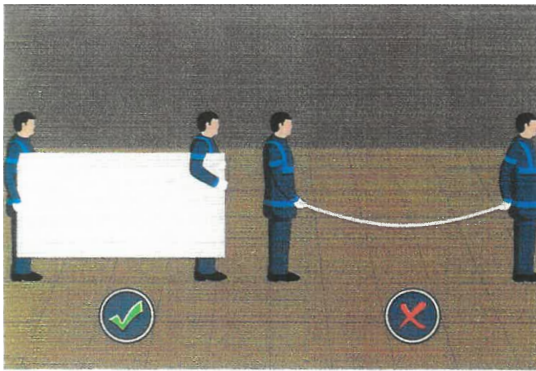
Table of Contents

INSTALLATION GUIDE: NVELOPE NV1 SYSTEM (NON-COMBUSTIBLE CONSTRUCTION)	1
PROPER STORAGE AND HANDLING	3
SUITABLE SUBSTRATES	3
MATERIALS	4
FLASHING	4
MOISTURE BARRIER	4
HOW TO INSTALL NV1 SYSTEM & COMPONENTS	4
INSTALLATION OF ACRYTEC PANELS	5
CONCEALING FASTENERS	6
SEALANTS	6
POST-INSTALLATION PRECAUTIONS	6

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.

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
- Single and double brackets with thermal isolator: Size as noted on drawings
- Fasteners (for bracket to substrate): Engineer approved
- Insulation: Optional
- Aluminum T Rail
- Fasteners (for T Rail to bracket): #12 x 7/8" stainless steel self tapping screw
- Non-combustible Acrytec panels
- Panel to T Rail adhesive: One component, moisture curing, polyurethane 3M 540
- Joint Sealant: Willseal 600 pre-compressed polyurethane foam sealant.
- Fasteners (for panels to T Rail): either #10 x 1-1/4" Button Head stainless steel screw, a 1-1/2" x 3/16" stainless steel rivet, or a #6 x 1-1/4" Flat Socket Self-Drilling corrosion coated stainless steel screw

Note: The #6 x 1-1/4" Flat Socket screw is only to be used when concealing of fasteners is required.

- Panel Concealing Filler: Matching acrylic material for countersunk and concealed screw fasteners, and site cut panel edges

Note: Concealing of fasteners is only applicable to certain finishes.

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 NV1 System & 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) Using engineered stainless steel fasteners, vertically attach single and double adjustable brackets to structural substrate (placement and layout shown in shop drawings).

Note: Insulation may be added in between adjustable brackets.

- 2) Insert T Rail into adjustable brackets and make level.
- 3) Lock T Rail into place using provided stainless steel fasteners.
- 4) Maintain a 5mm gap for expansion between all channels.
- 5) Incorporate expansion joint details where required.
- 6) Vertical channels should not span between floors

Installation of Acrytec Panels

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 Willseal 600 pre-compressed polyurethane foam sealant in between all panels and dissimilar materials where possible.
- Specified adhesive must be used in conjunction with mechanical fasteners on all Acrytec Panels.
- Install panel to the channels using appropriate size and type of mechanical fasteners (either #10 x 1-1/4" Button Head stainless steel screw, a 1-1/2" x 3/16" stainless steel rivet, or a #6 x 1-1/4" Flat Socket Self-Drilling corrosion coated stainless steel screw).

Note: The #6 x 1-1/4" Flat Socket screw is only to be used when concealing of fasteners is required.

- Acrytec panels should not span between floors.
- Pre drilling all Acrytec panels before the installation of each mechanical fastener is recommended. Remove panel dust created from drilling immediately.
- Space mechanical fasteners 20mm from panel edges and 75mm from panel corners. Mechanical fasteners are to be spaced at 600mm vertically and 400mm horizontally on every stud.

Note: If concealing the fasteners is required, counter sink all fasteners to a depth of 4mm below surface.

Concealing Fasteners

EXTREMELY IMPORTANT:

- A. Prior to concealing screw holes, ensure panel surface is flat and clean using an air compressor.
- B. Mix material in container prior to use.
Note: Do not add water to the mixture. Do not let material freeze in storage.
- C. Using supplied Acrytec material, fill the fastener cavity. Do not exceed the size of the screw hole diameter.
- D. Remove excess material to ensure a flat surface.
- E. Conceal screw heads as soon as possible to avoid colour variations.
(Recommended time lapse of no more than 24 hrs).

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.