

Project _____



SECTION : Demountable Dry-Flood Panels

PART 1 - GENERAL

1.1 SCOPE

- A. Made to order dry flood modular panels. Project includes furnishing and installing flood shield panels at attachment anchors on the building aligning with pre-drilled holes in the shield's perimeter framing.
- B. Composite panels, factory framed in aluminum attachment channels and fitted with rubber compression gasket facing structure and sill as determined by mounting surface conditions.

1.2 SUBMITTALS

- A. Upon request, submit manufacturer's product samples. Include material descriptions, profiles and finishes of aluminum components.

1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications; Material and products shall be manufactured by a company continuously and regularly employed in the manufacture of similar materials for a period of at least five (5) consecutive years.
- B. Installer's Qualifications: Installation shall be by an experienced tradesperson with evidence of satisfactory completion of projects of similar size, scope and type.
- C. Performance Requirements: The manufacturer shall be responsible for the configuration and fabrication of the complete panel system in kit form.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver panel system, components and materials in manufacturer's standard packaging.

1.5 WARRANTY

- A. Submit manufacturer's written warranty agreeing to repair or replace defective laminated panels and aluminum surface finishes for a period of 5 years.
- B. Submit installers written warranty to repair or replace defects in workmanship within 1 year of the date of completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. As a Basis-of-Design, details and specifications have been based upon products manufactured and distributed by VuSafe Industries, LLC (888-232-2331) or approved equal.



2.2 Flood Panels

A. Panels are a composition of a proprietary, moisture proof honeycomb core laminated on 2 sides with a single layer of fiberglass. Constructed panel weight approximately 1 lb./sq.ft.

1. Modular panel constructed of structural honeycomb core, 2 sided skin fiberglass thermo-bonded to core.
2. Nominal ½ inch panel thickness
3. Mechanical properties: **see appendix A**

2.3 Perimeter Frame

A. Panels are factory installed in 4 sided extruded Aluminum alloy with T-5 temper, encapsulating the edge of the panel profile. Continuous rubber compression bulb seals with adhesive attachment are affixed to the frames vertical and sill members facing the dry side of the opening.

1. LHTF frame profile with corner key assembly and integrated attachment channel.
2. Rubber compression bulb with 3M adhesive backing.

B. Painted Frame Finish:

1. Color : White

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, supporting structure and installation conditions. Do not proceed with anchor hardware installation until unsatisfactory conditions have been corrected.

1. Inspect mounting surface to insure a smooth, level and clean attachment condition.
2. Inspect rubber compression bulb to insure no defects.

3.2 INSTALLATION

A. Install the panel in accordance with the manufacturer's installation recommendations.

1. Drill 5/16" holes in panel frames @ 10" o.c. to correspond to anchor points on structure.
2. Install permanent anchors to attachment structure using suitable hardware
3. All openings are to be marked and numbered by location. Consult with project architect to number all locations on the design prints.
4. Provide consultation with building owner or project management to review proper installation and maintenance procedures.

3.3 CLEANING & MAINTENANCE

- A. Inspect, clean and dry panels after de-mounting.
- B. Install male storage caps to cover anchors when not in use.
- C. When not in use, panels shall be stored, stacked vertically, in a clean, dry enclosure protected from sunlight.

Appendix A

PROPERTIES		UNITS	
Thermal	CTE	in/in/°F	
	Insulation	R-value	2.1
Physicals	Nominal Thickness	Inches	0.500
	Estimated Thickness	Inches	0.561
	Fiberglass (by volume)	%	46.7%
	Fiberglass (by weight)	%	65.0%
	Resin (by weight)	lbs/sq. ft.	0.20
	Fiberglass (by weight)	lbs/sq. ft.	0.37
	Weight/Sq. Ft.	lbs/sq. ft.	0.78
Mechanical Performance	0° Modulus, Ex	MSI	0.30
		GPa	2.06
	90° Modulus, Ey	MSI	0.30
		GPa	2.06
	Shear Modulus, Gxy	MSI	0.07
		GPa	0.48
	0° Flex Stiffness	lb-sq. in/in	11,480
	90° Flex Stiffness	lb-sq. in/in	11,480
	0° Ult. Bend Moment	in.lb/in	750
	90° Ult. Bend Moment	in.lb/in	794.1
	0° Tensile Ult. Stress	KSI	4.1
		MPa	28.6
	90° Tensile Ult. Stress	KSI	4.8
		MPa	33.1
	Shear Ult. Stress	KSI	1.6
		MPa	10.9
	0° Comp. Ult. Stress	KSI	4.8
		MPa	33.1
90° Comp. Ult. Stress	KSI	6.3	
	MPa	43.4	