**FEBRUARY 2015**

**Notes to Specifier —2 ¾" Explosion Venting Wall Panel Specification**

Specifier- please consult Kalwall for assistance at info@kalwall.com or 1-800-258-9777. Some specification choices are very involved and should require consultation in order for the project's performance to be as desired by the Owner and Architect.

**1.1 SUMMARY**

1.1.B. Related Sections. ENTER any and all sections that may affect this spec.

**1.2 SUBMITTALS**

1.2.E.1.n. [LEED](http://www.kalwall.com/spec/leed-wall-spec.doc) submittal requirements need to be written in consultation with manufacturer for accuracy.

1.2.E.1.o. Daylight Autonomy Report submittal requirements need to be coordinated with manufacturer prior to final specification. Large projects should be modeled to assist in achieving desired results.

[More information about Daylight Modeling](http://www.daylightmodeling.com).

**1.4** **PERFORMANCE REQUIREMENTS**

1.4.A.2.a./b. ENTER any and all loads required for structural design in PSF, not wind speed.

1.4.A.2.c. The recommended EV release pressure is the Design Wind Load (+10 -0) PSF. For example, if the design wind load is 25 PSF, the EV Release Pressure would be 35 (+10 -0) PSF. This is to prevent the wall systems release as a result of wind pressure.

NOTE: For the optional FM approved explosion venting system, the design release pressure must be between 20 PSF and 40 PSF.

ENTER the EV design Release Pressure

1.4.A.2.d. In seismically active areas provide SDS and IP (from structural drawings). Delete if not required.

**1.6 WARRANTY**

1.6.B. Extended warranties may be available depending on project design, scope, location and exposure. Consult manufacturer; all additional cost. Options are:

* Up to 5 year Materials and Workmanship.
* Up to 10 year Limited Warranty covering separation of faces from grid core, and/or abnormal color change of the exterior face.
* Up to 20 year Limited Warranty against reinforcing fiberbloom.

Extended Warranties will not apply to all systems, designs, or applications. Please consult manufacturer.

**2.2 PANEL COMPONENTS**

2.2.A.2.a. Flame Spread of Kalwall Engineered EV system: DELETE 2.2.A.b

* Specify 50 for the standard panel, which meets IBC Class B Interior Finish requirements for most building spaces.
* Specify 25 which meets IBC Class A, which may be required in unsprinklered, occupied spaces -see IBC Chapter 8.

ENTER 50 or 25

NOTE: For the optional FM approved explosion venting system: DELETE 2.2.A.a.

2.2.A.3.b. Strength of Kalwall Engineered EV system:

The impact strength of the standard .070” thick exterior face is 70 ft. lbs.

* The optional Hi-Impact face is 230 ft. lbs. which may be required in vandal prone exposures among others. Hi-impact color in white only.

ENTER 70 or 230

NOTE: For the optional FM approved explosion venting system: ENTER 60

2.2.A.4.a. Appearance exterior face sheets of the Kalwall Engineered EV system:

* Standard exterior face is .070” thick and available in standard white or crystal, and optional Kal-Tints.
* Optional Hi-Impact is .052" thick in white only.

ENTER 0.070” or 0.052” and appropriate color

NOTE: For the optional FM approved explosion venting system, the exterior SW-C face is .070" thick in white or crystal.

ENTER 0.070” SW - C and appropriate color

CAUTION: Face colors affect solar properties. View [Light Transmission/SHGC Chart](http://www.kalwall.com/spec/lt-shgc.htm). Best to confer with Kalwall.

2.2.A.4.b. Appearance interior face sheets of the Kalwall Engineered EV system:

* Standard interior faces, either flame spread, are .045” thick in white or crystal.
* Optional Hi-Impact face is .052” thick in white only.

ENTER 0.045” or 0.052” and appropriate color

NOTE: For the optional FM approved explosion venting system, the interior B-3A face is .052" thick in white only.

ENTER 0.052” B-3A and white

2.2.B.1. The grid core may be aluminum or a thermally broken composite of aluminum and fiberglass for maximum thermal efficiency.

ENTER Aluminum or Thermally Broken Composite

**2.3 PANEL CONSTRUCTION**

2.3.A.2./3./4. Light Transmission, Solar Heat Gain Coefficient (SHGC) and panel U-factor are closely linked and must be specified accordingly. [View Light Transmission/SHGC Chart](http://www.kalwall.com/spec/lt-shgc.htm).

ENTER appropriate values for each

NOTE: For the optional FM approved explosion venting system, the following "U" factors are not available: .05TB, .53 and .53TB.

Furthermore, light transmission needs to be carefully chosen to meet the daylighting expectations of the owner to avoid too much light with resulting unwanted glare and overwhelming solar heat, or too little light to be useful. Kalwall offers a modeling service – see [www.DaylightModeling.com](http://www.DaylightModeling.com), which should be performed and agreed upon prior to final design and specification.

DELETE grid type (thermally broken or aluminum) not used in 2.3.A.4.

2.3.A.5. Panel U-factors specified above are for just the panel itself. The National Fenestration Rating Council has established standardized procedures for comparing fenestration systems based on a complete installed system. View the [NFRC Certified Systems values chart](http://www.kalwall.com/spec/nfrc.htm) for most Kalwall systems. In order to find the appropriate value, specifier must know the properties of the panel specified above as well as the nature of the installation system for the project.

ENTER the NFRC Certified System U-value

2.3.A.6. Grid Pattern of the Kalwall Engineered EV system:

 Nominal size is 12” x 24” vertically oriented along the panel length, called Shoji pattern. Other common sizes are 8” x 20”; Square patterns, called Tuckerman - commonly 8” x 8” or 12” x 12”; custom sizes and patterns offered.

ENTER Nominal grid size(s) and Pattern

Caution, span charts are based on 12” x 24”, other patterns affect span capability. Contact Kalwall regarding other patterns such as Reverse Shoji.

NOTE: For the optional FM approved explosion venting system, an 8" x 20" Shoji pattern is required.

ENTER 8" x 20" and Shoji

**2.4** **BATTENS AND PERIMETER CLOSURE SYSTEM**

2.4.A. Closure System ENTER Standard or Thermally Broken

2.4.E. Finish

The standard finish for the perimeter system is factory applied paint in 13 standard colors meeting the performance requirements of AAMA 2604. View the [color chart](http://www.kalwall.com/colorchip.htm).

ENTER Kalwall KCRF color and number

Options are anodized or unfinished “mill”. Alternate finishes are discouraged due to cost and delivery delay, but may be available for specific projects.

DELETE Finish not selected