

CURTAIN WALL & SOLID FACADE OPTIONS

EVELYN RICHARDSON • ARCH2330 • PROFESSOR KING

CURTAIN WALL DESIRED LOOK

The Lushi Hill Club / Atelier Fronti

This building includes three floors. The 36'-0" high. glass wall is suspended in the west. The upper glass wall is 23'-0" high and needed to be tempered according to the standard, but only 23'-0" tempered glass can be produced by the tempering furnace, thus the curtain wall challenges the limit of this era unintentionally.



unitized curtain walls

Home » Products » Facades » Unitized Curtain Walls

Our unitized Curtain Wall system integrates translucent panels with fixed or operable glazing units, opaque panels, and louvers, etc. for single or multi-story applications.

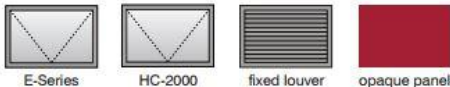


KALWALL SPECS:

Unitized Curtain Wall

Factory-unitized panels up to 5' wide x 35' high (1500 mm x 10700 mm) depending on shipping and handling limitations. Our Unitized Curtain Walls are delivered to the site ready to install with no additional finishing. Eliminate superfluous structure required with most other systems. Unitize translucent panels with fixed and operable windows; drainable, fixed blade louvers; even opaque aluminum or FRP faced panels utilizing our Clamp-tite™ fastening system for a single source "kit of parts" to save time and money.

Choose between two window models: the Heavy Commercial HC-Series and the high performance, E-Series in both fixed and operable sash. Factory-installed glazing of all types are available. Performance options to AAMA/ANSI P1 AW-90. Hurricane-resistant windows to TAS and ASTM standards.

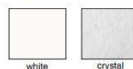


Fiberglass Reinforced Polymer (FRP) Faces

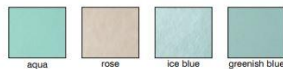
Kalwall has developed a full line of high performance FRP face sheets including the latest generation of Super Weathering (SW) formulations that are unrivaled in the industry. Along with a variety of high performance options, Kalwall offers both standard and optional colors and finishes in order to provide designers with more flexibility. Translucent White and Crystal FRP face sheets are standard. The four Kal-tints are optional. Optional FRP finishes are available for interior face sheets only.

are available for interior face sheets only.

Standard Translucent Colors



Optional Translucent Kal-tints



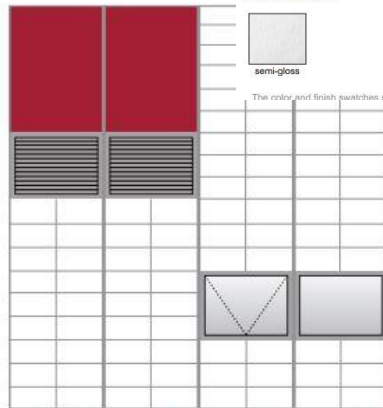
Standard Finish



Optional Finishes



The color and finish swatches shown above are non-representational. All final color and finish selections should be made from actual product.



Factory Unitized Curtainwall Diagram: shipped as prefabricated units with windows (factory or field glazed), louvers, even opaque panels.

Standard KCRF Colors



Aluminum Finishes

The Clamp-tite™ fastening system is available in either mill finish or Kalwall Corrosion Resistant Finish (KCRF), a high performance, fluoropolymer-based coating that meets the performance requirements of AAMA 2604. (AAMA 2605 and anodized options are available with some product exceptions). KCRF is highly resistant to acids, alkalis, salt, industrial and moisture-laden atmospheres.

SPECS:

Facade Details

For vertically oriented, flat panels

These are standard Clamp-lite™ details for 2-3/4" (70 mm) thick panels. Systems for other conditions, including panels on edge, concealed fastener options, Kalcurve®, Explosion Venting or Blast Resisting, are similar, but do contact Kalwall for specifics. Electronic CAD versions of these Facade details and many more are available at: KALWALL.COM

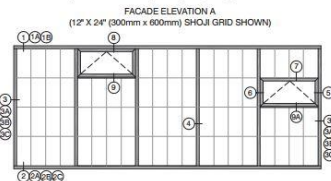
Blue indicates field installed items and may require trimming.
Red indicates thermal breaks. Optional sill flashing available.

Kalwall Span Table: 4' (1200 mm) Wide Panel Module

Maximum Allowable Clearspan** for Standard 2-3/4" (70 mm) Panels for Facades
Shoji 12" x 24" (300 mm x 600 mm)

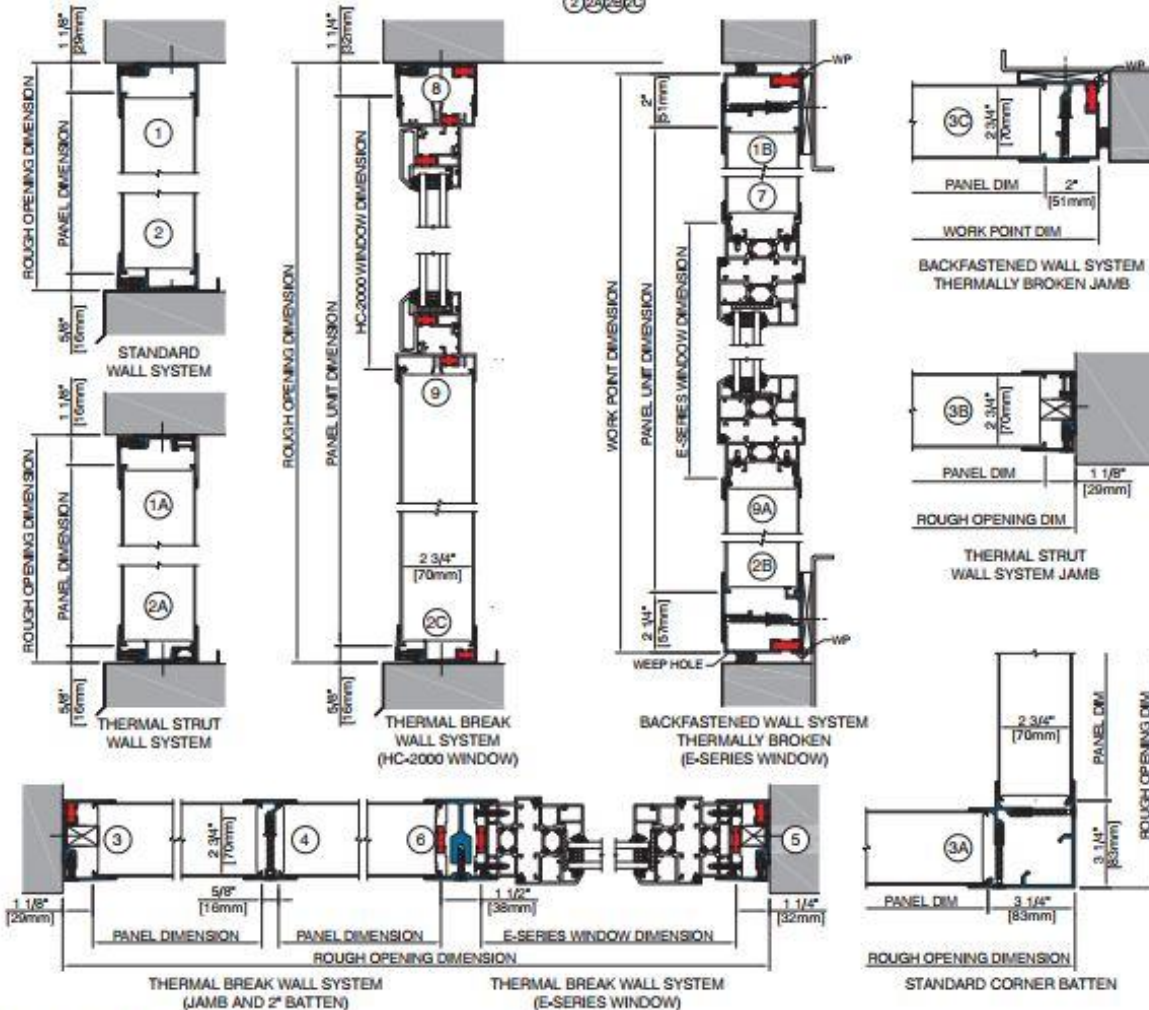
| Translucent Panel | Panel Unit (Mid-span Joint) |
|-----------------------------|-----------------------------|
| 2" (51 mm) batten | 12'-7" (3835 mm) |
| 2-3/4" (70 mm) ST + #12SSSE | 9'-2" (2794 mm) |
| 3-1/4" (83 mm) IS-H | 16'-2" (4927 mm) |
| | 13'-1" (3987 mm) |
| | 19'-8" (5995 mm) |
| | 17'-11" (5461 mm) |

Clearspan at 25 PSF (1.2 kPa) wind pressure, L/60 minimum. Spans vary with panel core and orientation.
Clearspan at 25 PSF (1.2 kPa) wind pressure, L/60 minimum. Spans vary with panel core and orientation. CAUTION: Spans vary with panel core and orientation.



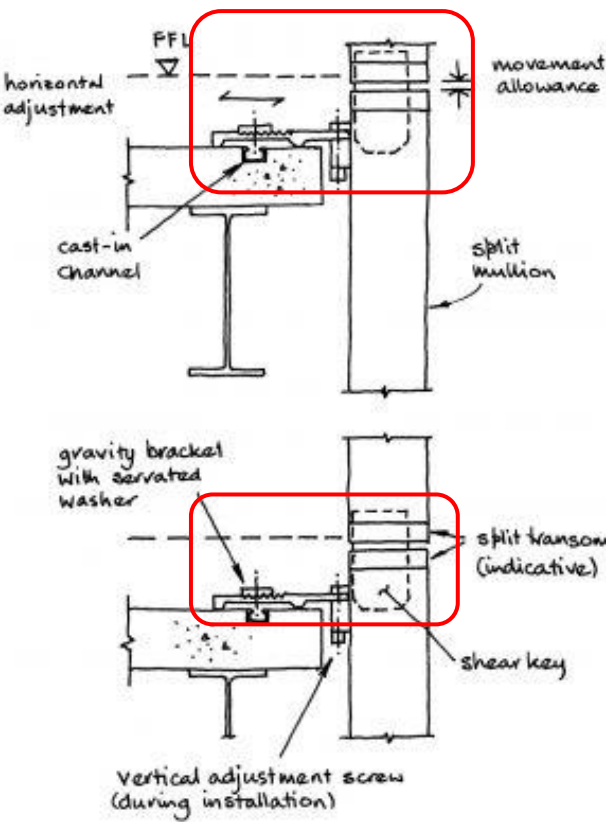
Unitized Curtain Walls

- Standard System
- Thermal Break System
- Thermal Strut System
- Back Fastened System
- Kalcurve® Standard System
- E-Series Window
- Fixed Window
- Project-Out Window
- Project-In Window
- HC 2000 Window
- Fixed Window
- Project-Out Window
- Project-In Window
- Drainable Louver
- Concealed Fastener System
- Snap on Cover System
- Wall Batten details
- Wall Head details

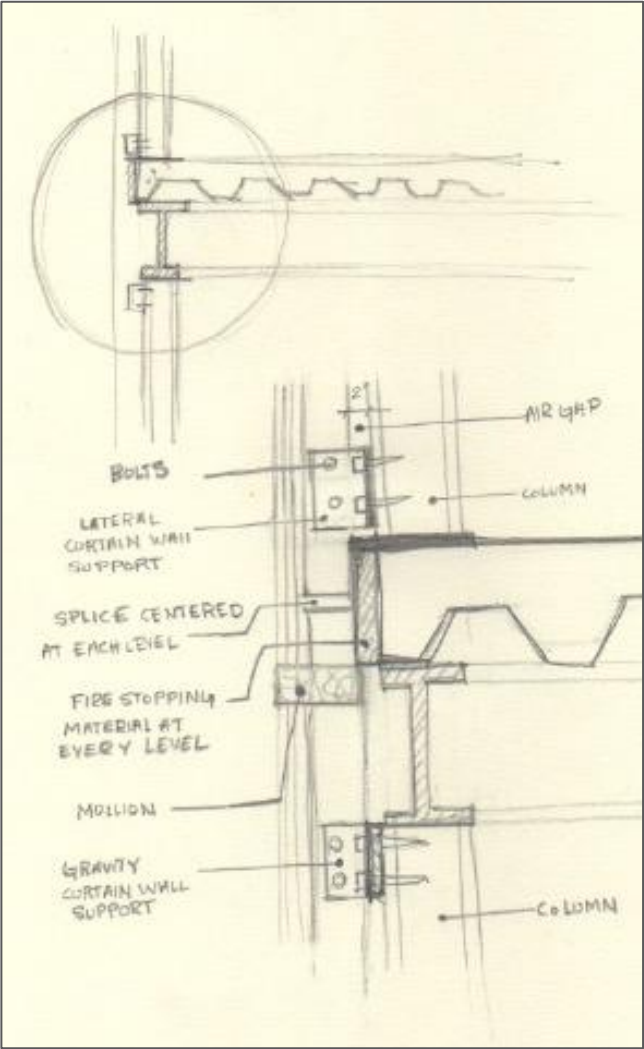


KALWALL®

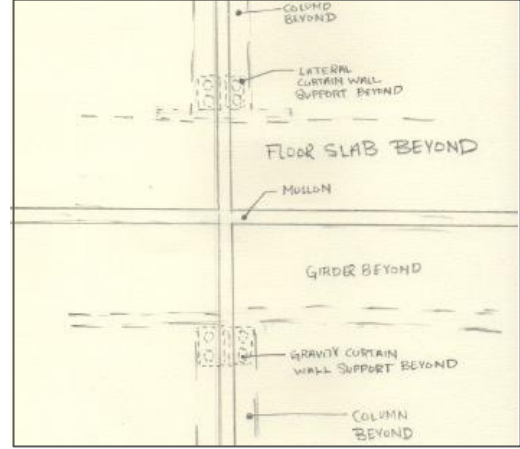
SKETCHES:



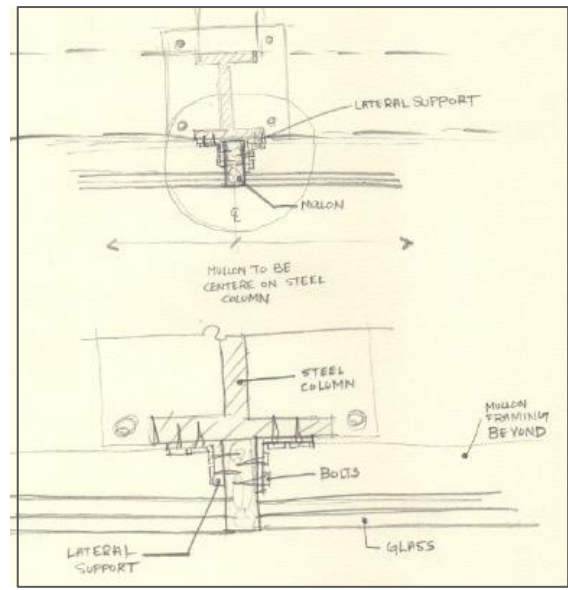
SEC



ELEVATION DETAIL



PLAN DETAILS



SOLID FACADE WALL DESIRED LOOK

Product: Library and Learning Center

Family: concrete skin - Facade

Manufacturer: Rieder

Country: Austria

Product Category: fibreC Facade

Product: fibreC Facade 13 mm

Product Information:

Library and Learning Center University of Economics Vienna Austria

6.100 m2 fibreC 440 m2 fibreC 3D Bianco & Liquide Black

Sizes: 2500 x 1200 x 13 mm | 3100 x 1200 x 13 mm | 3600 x 1200 x 13 mm Fixing systems

Substructure: aluminium, steel

Visible: rivets, screws

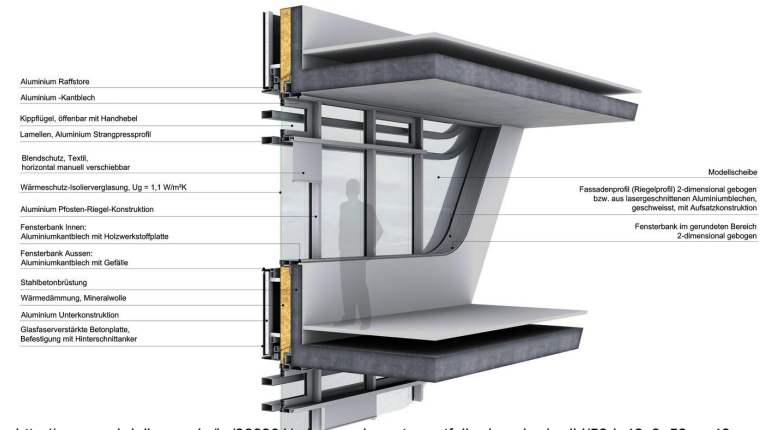
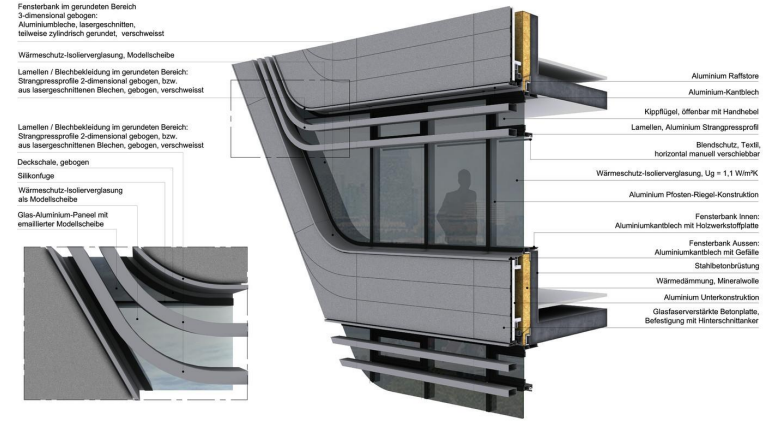
Concealed: Rieder Power Anchor, undercut anchor, adhesive



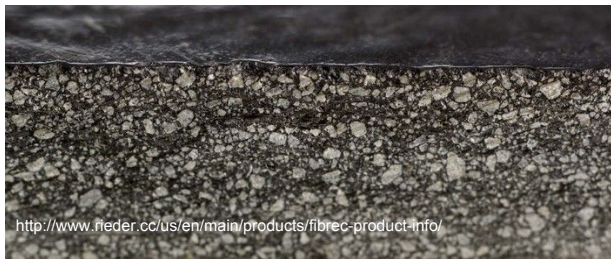
CONCEPT:

Architect Zaha Hadid opted for glassfibre-reinforced concrete panels as distinctive facade material. The Austrian Rieder Group won the bid with its fibreC facade panels. Beyond the differently coloured concrete look, the 13mm thin glassfibre concrete elements were able to meet all the requirements of the star architect, including aesthetics, material quality and the challenge of implementing the design of a slightly curved building cubature with curved panels

The development of concrete skin was inspired by Rieder's vision of a concrete cladding panel that is both stable and lightweight. The large-format panels are 13 mm thin and give architects plenty of scope in the design of individual facades, with regard to colour, structure and form. Glassfibre reinforced concrete is in-combustible and made of mineral-based raw materials, giving the panels their unique characteristics. The authentic appearance creates a vivid facade. Since concrete skin can be used for interior applications as well, it becomes possible to overcome traditional boundaries of space and to increase the element of flow inherent in the materials. Interior and exterior spaces are merged into one.



<http://www.archdaily.com.br/br/868301/o-impresionante-portfolio-de-zaha-hadid/58de43c8e58ece48a3000139-o-impresionante-portfolio-de-zaha-hadid-detalle-biblioteca-e-centro-de-aprendizagem-da-universidade-de-economia-de-viena-zaha-hadid-architects>



The technology and production processes of glassfibre concrete have been perfected for decades and tested practically for more than 30 years.

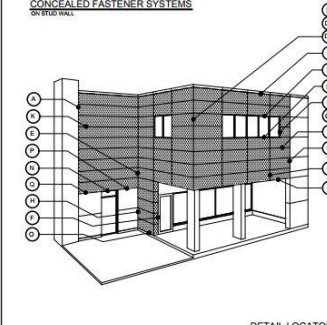
A special extrusion process incorporates layers of glassfibre into a concrete matrix; in the top layer and underlayer the fibres are undirected and scattered, in the medium layer they take the form of roofings (fibre bundles).

The omission of steel reinforcement allows the construction of "slim" concrete elements which are highly stressable despite being extremely thin-walled. The result is an extremely thin slab with 13 mm (1/2") thickness, which is very light-weight, yet has a high flexural strength. The slabs are fabricated in the different colours before being cured for 28 days



RIEDER DETAILS:

CONCEALED FASTENER SYSTEMS
ON RIEDER PANEL



DETAIL LOCATOR

JULY 2010

LEGEND DETAILS

Box C North America Products Distributed by Sound Solutions

1 1/2" (38mm) Thin Box C PANEL

Standard Sizes:

- 47" F x 81.2" W x 1" (1219 x 2060 x 25mm)
- 47" F x 117.2" W x 1" (1219 x 3000 x 25mm)

Other Products Available from Sound Solutions:

- 2 STAINLESS STEEL CONCEALED NAIL FASTENERS (Pw/3. Pre-drilled holes on Siding Clip Extrusion)
- 3 STAINLESS STEEL FEMALE PLUS FASTENERS (Pw/3. Pre-drilled holes on Box C Panel)
- 4 CONT. HORIZONTAL CHANNEL EXTRUSION
- 5 LSTP (steel) w/ g. SLIDING CLIP EXTRUSION

Hardware & Accessories Items (by Other):

- 6 HORIZONTAL/VERTICAL SUBMIT SUPPORT (GALV.)
- 7 SEPARATION TAPE
- 8 1/4" x 3/4" TYPE AB FASTENERS (OR EQUIVALENT)
- 9 INSULATION
- 10 MEMPHIS BARRIER
- 11 1/4" x 1" P.L. TYPE AB FASTENERS
- 12 METAL TRIM/FLASHING/GAP
- 13 PERFORATED/VENT METAL TRIM

TABLE OF CONTENTS

| Page/No. | Details |
|---|---------|
| Box DETAIL LOCATOR | |
| Box TABLE OF CONTENTS | |
| Box PARTIAL PANEL ELEVATION | (A) |
| Box TYPICAL VERTICAL JOINT | (B) |
| Box WINDOW JAMB | (C) |
| Box WINDOW JAMB (Option) | (D) |
| Box OUTSIDE CORNER JOINT | (E) |
| Box OUTSIDE CORNER JOINT (Option-1) | (F) |
| Box OUTSIDE CORNER JOINT (Option-2) | (G) |
| Box INSIDE CORNER JOINT | (H) |
| Box DOOR JAMB | (I) |
| Box TRANSITION DETAIL @ ARCHITECTURAL PANEL | (J) |
| Box INSIDE CORNER JOINT | (K) |
| Box PARAVENT DETAIL | (L) |
| Box 1/4" HORIZONTAL JOINT | (M) |
| Box WINDOW HEAD DETAIL | (N) |
| Box WINDOW SILL DETAIL | (O) |
| Box DOOR HEAD DETAIL | (P) |
| Box DOOR SILL DETAIL | (Q) |
| Box BASE DETAIL | (R) |
| Box TRANSITION DETAIL @ PROXIMA | (S) |
| Box TRANSITION DETAIL @ ARCHITECTURAL PANEL | (T) |
| Box PANEL/OFFSET TRANSITION DETAIL | (U) |

sound solutions
Innovative Products

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[fibre C]

Page 004 of 226

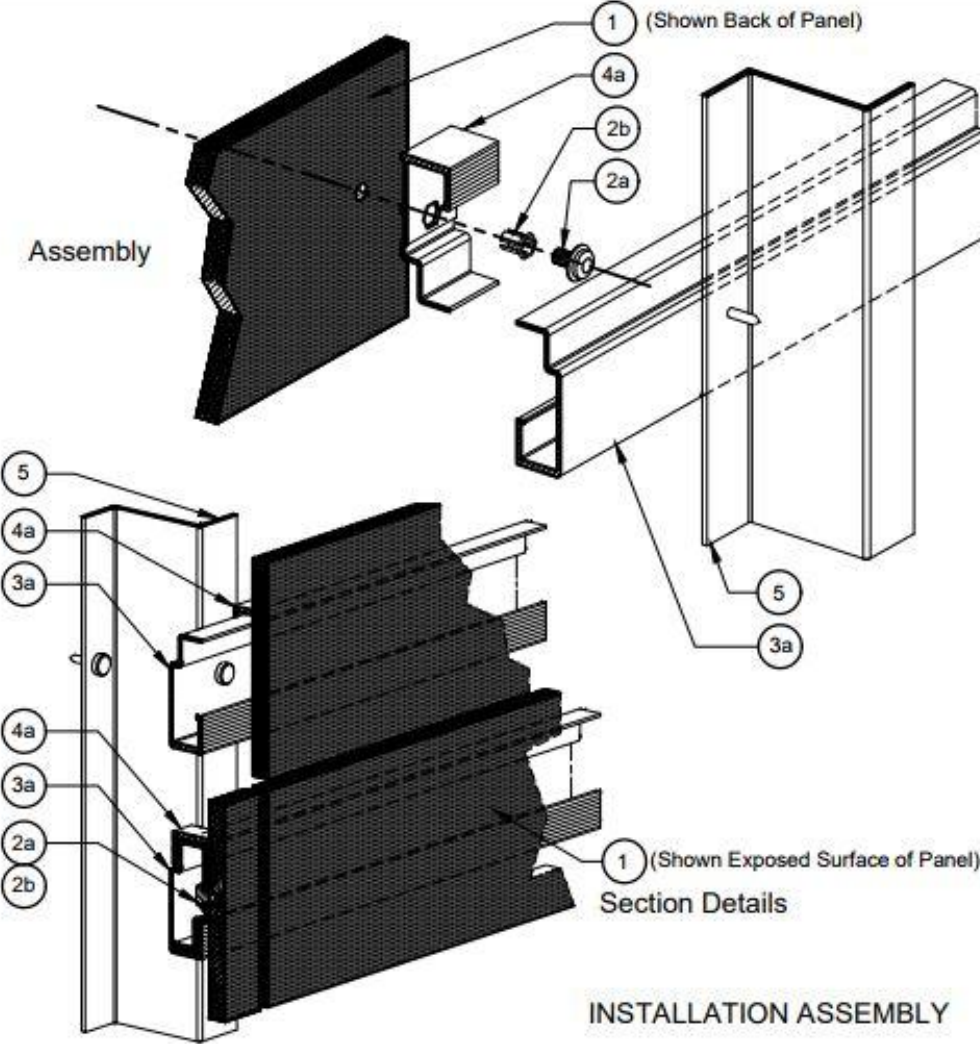
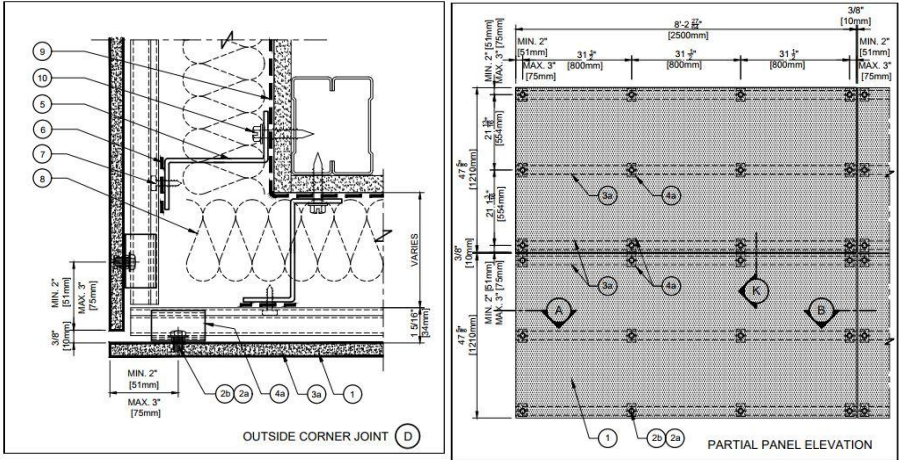
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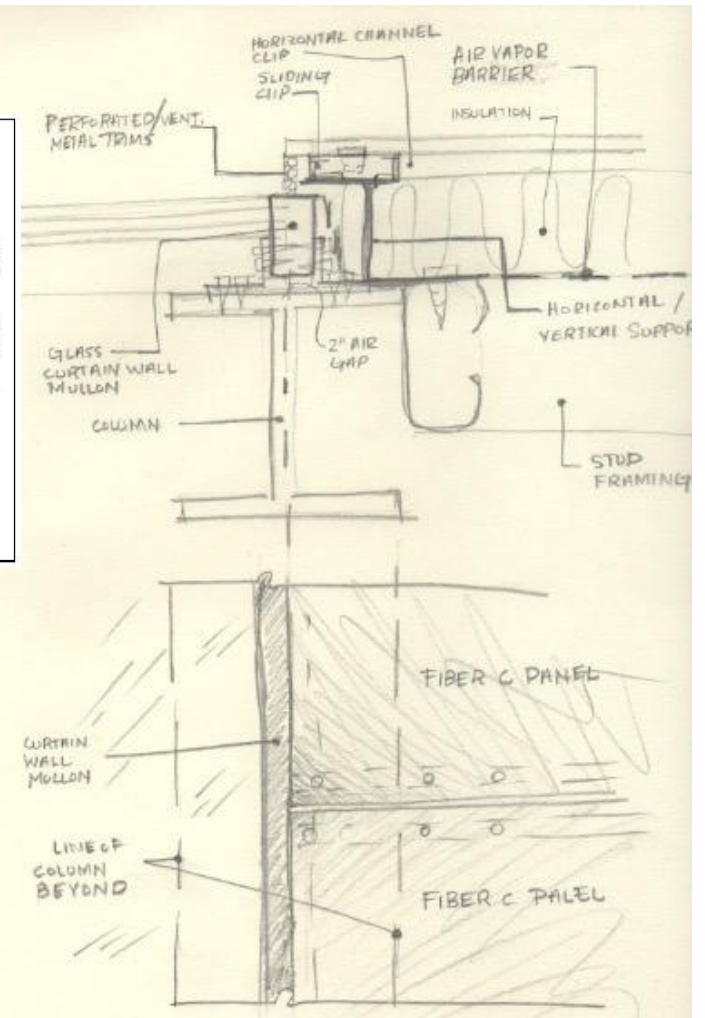
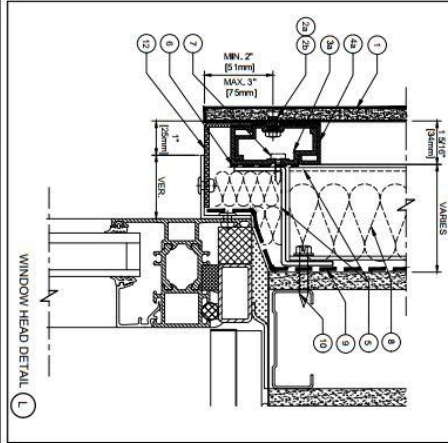
[fibre C]

Page 004 of 226

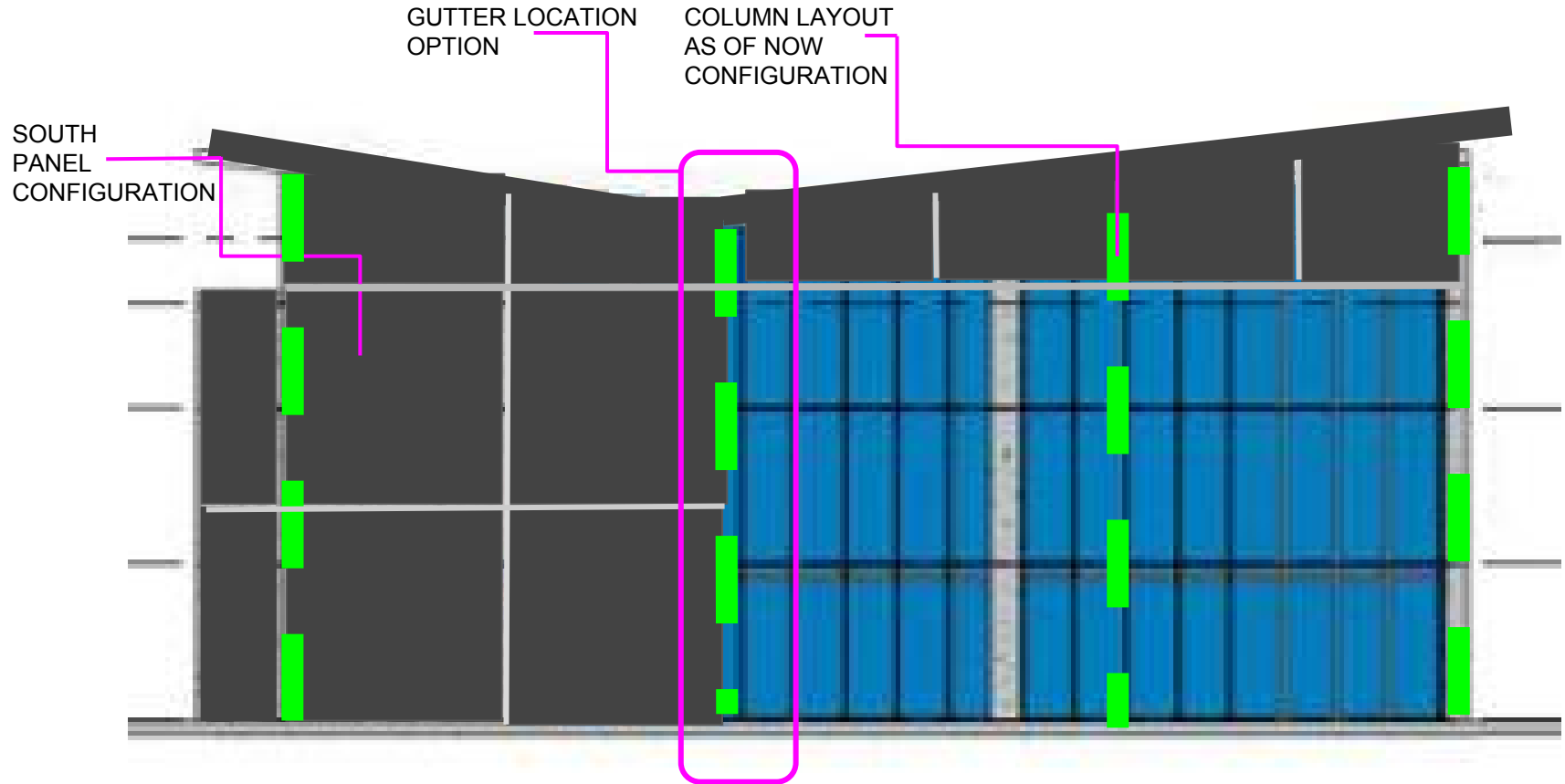


| LEGEND DETAILS | TABLE OF CONTENTS |
|---|---|
| <u>Fibre C North America Products Distributed by Sound Solutions:</u> | <u>Page No:</u> |
| <p>1 1/2" (13mm) Thk. fibre C PANEL</p> <p><u>Standard Sizes:</u></p> <p>* 47 1/2" x 8'-2 3/4" x 3/4" (1210 x 2500 x 13mm)</p> <p>* 47 1/2" x 11'-0 3/4" x 3/4" (1210 x 3600 x 13mm)</p> | <p><u>Details:</u></p> <p>00a DETAIL LOCATOR</p> <p>01a TABLE OF CONTENTS</p> <p>02a PARTIAL PANEL ELEVATION</p> <p>03a END DETAIL (A)</p> <p>04a TYPICAL VERTICAL JOINT (B)</p> <p>05a WINDOW JAMB (C)</p> <p>06a WINDOW JAMB (Option)</p> <p>07a OUTSIDE CORNER JOINT (D)</p> <p>08a OUTSIDE CORNER JOINT (Option-1) (Da)</p> <p>09a OUTSIDE CORNER JOINT (Option-2) (Db)</p> <p>10a INSIDE CORNER JOINT (E)</p> <p>11a DOOR JAMB (F)</p> <p>12a TRANSITION DETAIL @ ARCHITECTURAL PANEL (G)</p> <p>13a INSIDE CORNER JOINT (H)</p> <p>14a PARAPET DETAIL (J)</p> <p>15a TYP. HORIZONTAL JOINT (K)</p> <p>16a WINDOW HEAD DETAIL (L)</p> <p>17a WINDOW SILL DETAIL (M)</p> <p>18a DOOR HEAD DETAIL (N)</p> <p>19a BASE DETAIL (O)</p> <p>20a TRANSITION DETAIL @ PRODEMA (P)</p> <p>21a TRANSITION DETAIL @ ARCHITECTURAL PANEL (Q)</p> <p>22a PANEL/SOFFIT TRANSITION DETAIL (R)</p> |
| <u>Other Products Available from Sound Solutions:</u> | |
| <p>2a STAINLESS STEEL CONCEALED MALE FASTENERS (Req'd. Pre-drilled Holes on Sliding Clip Extrusion)</p> | |
| <p>2b STAINLESS STEEL FEMALE PLUG FASTENERS (Req'd. Pre-drilled Holes on fibre C Panel)</p> | |
| <p>3a CONT. HORIZONTAL CHANNEL EXTRUSION</p> | |
| <p>4a 1.57" (40mm) Lg. SLIDING CLIP EXTRUSION</p> | |
| <u>Miscellaneous & Accessories Items (By Others):</u> | |
| <p>5 HORIZONTAL/VERTICAL SUBSIRT SUPPORT (GALV.)</p> | |
| <p>6 SEPARATION TAPE</p> | |
| <p>7 #14 x 3/4" TYPE AB FASTENERS (OR EQUIVALENT)</p> | |
| <p>8 INSULATION</p> | |
| <p>9 AIR/APOUR BARRIER</p> | |
| <p>10 #14 x 1 1/8" Lg. TYPE AB FASTENERS</p> | |
| <p>11 METAL TRIMS/FLASHING/CAP</p> | |
| <p>12 PERFORATED/VENT. METAL TRIMS</p> | |

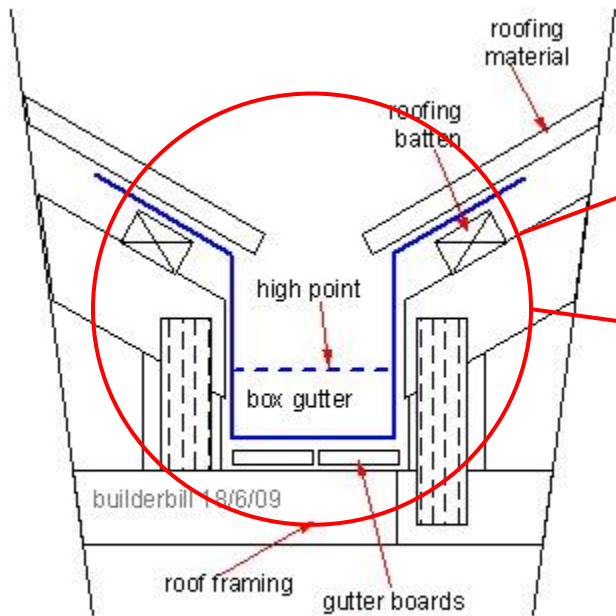
Page: 01a of 22a



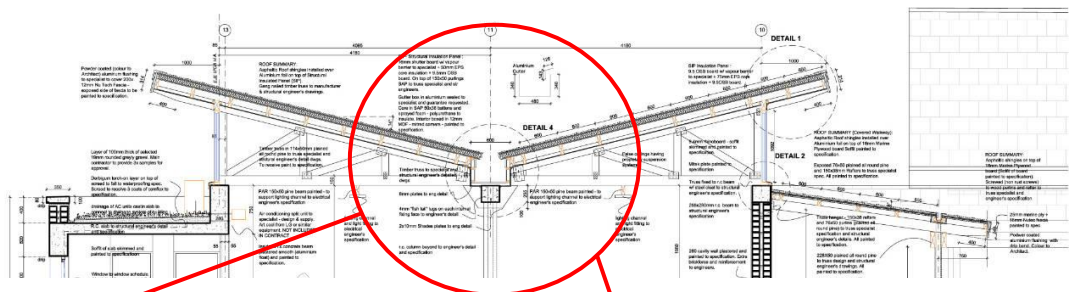
SOUTH ELEVATION CONFIGURATION:



ROOF DETAILS:



Box Gutter Between Two Parallel Roof Surfaces



Kalwall Panel Span Table: 4' (1200 mm) Wide Panel Module

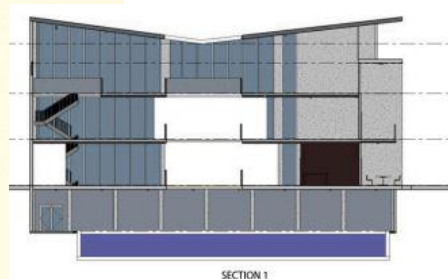
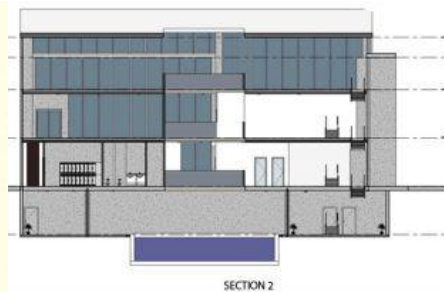
Maximum Allowable Clearspan for Standard 2-3/4" (70 mm) Panels for SysteQ®

| | | | |
|---|-------------------|-------------------|--|
| Step 8" x 30" (200 mm x 300 mm) | | | |
| Live Load | 30 PSF (1.44 kPa) | 40 PSF (1.92 kPa) | |
| Clearspan | 11'-4" (3276 mm) | 10'-4" (3221 mm) | |
| Step 12" x 24" (300 mm x 600 mm) | | | |
| Live Load | 30 PSF (1.44 kPa) | 40 PSF (1.92 kPa) | |
| Clearspan | 10'-4" (3221 mm) | 8'-8" (2645 mm) | |

Clearspan at 25 PSF (1.2 kPa) wind pressure, UWB minimum at 212. Spans based on engineering data and tests. Larger clearspan are possible. Contact the factory.

Recommended minimum pitch for SysteQ is 2:12.

For on-slope, flat and curved panels
These are standard Clamp-Tite™ details for 2-3/4" (70 mm) thick panels. Details for other conditions, including those for Self Supporting Ridge, Pyramid, Windborne Debris and Blast Resistant applications are similar, but not identical so please contact Kalwall for specifics. Electronic CAD versions of these Skyform details and many more are available at: KALWALL.COM



PLEASE CONTACT KALWALL FOR BRAN INFORMATION
ON KALCURVE 1807 AND LOW PROFILE BRAN VALVE

