

graphex.

Insulated Façade



Graphex Insulated Façade System Specification

graphex.

INSULATED FAÇADE SYSTEM

Our premium Insulated cavity based, rainscreen Façade System coated with our reinforced render system applied over our exclusive GRAPHEX Insulation panels.

The GRAPHEX Insulated Plaster Façade System offers a lightweight, complete thermal barrier to the weather extremes* which will keep your home cooler in summer and warmer in winter in a cost effective manner all the while protecting the structure.

Proven Technology

Our GRAPHEX Insulation panel is installed over the time tested cavity construction method along with our exclusive EdgeSeal flashing technology. Protected with our 6 layers of hand applied reinforced render, texture & paint. All finished with your choice of texture from our wide range incorporating 'genuine' Resene colours.

Attractive and Durable

This System carries our written Performance Guarantee, Workmanship Warranty from your qualified LBP Registered Plasterer. The System includes our premium OnSite Quality Assurance programme providing surety of performance from installation to finish.

**Innovative design.
Integrated systems.
Enduring finish.**

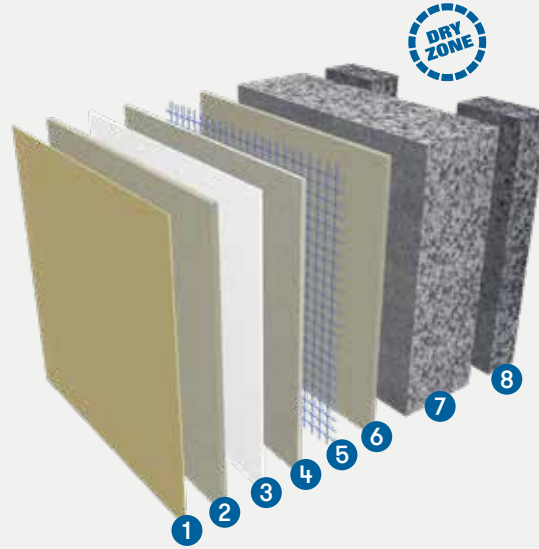




INSULATED FAÇADE SYSTEM

SYSTEM FEATURES:

- + Drained Rainscreen Façade System
- + Hand Plastered
- + Registered LBP plasterer application
- + Performance Guarantee
- + Patented EdgeSeal window flashing suite
- + GRAPHEX Thermal envelope
- + 'Genuine' Resene Colour Range
- + Technical OnSite Assistance
- + Seismic and Weathertight tested (BRANZ)
- + BRANZ Appraisal # 633



- 1 Resene X 200
- 2 Pre-Coloured Texture
- 3 Resene Limelock
- 4 PM100 Quick Render
- 5 Fibreglass Reinforcing
- 6 PM100 Quick Render
- 7 GRAPHEX Insulation
- 8 Cavity Battens



BRANZ Appraised 530 476
477 500
681 633
706 553

FPB .CO.NZ
FUTURE-PROOF BUILDING

P 0800 50 70 40
W reseneconstruction.co.nz

	INTEGRA Façade Light Weight Concrete	INTEGRA Flooring	INTEGRA Fencing	GRAPHEX Insulated Façade	GRAPHEX Masonry Overlay	GRAPHEX solid	Masonry Block	Fibre Cement	LiteRock	Brick	ICF(Polystyrene Blocks)	Tilt Panel	Artisan Interiors
Insulated	○	○		●	○	○					○		
Impact Resistance	○	○	○	●	○	○	○	○	○		○	○	
Acoustic	○	○	○			○			○	○	○	○	
Resene Colours	○		○	●	○		○	○	○	○	○	○	○
BRANZ	○			●	○	○	○	○	○				
Fire Tests	○			●	○	○	○	○	○	○	○	○	○
FPB	○	○	○	●	○	○	○	○	○	○	○	○	○
Full Render System	○		○	●	○	○	○	○	○	○	○		
Substrate supplied	○	○	○	●		○							
Acrylic Texture	○		○	●	○	○	○	○	○	○	○	○	
Mineral Texture	○		○	●	○	○	○		○	○	○	○	○
Cavity System	○			●				○	○				
GreenSite	○	○	○	●	○	○	○	○	○	○	○	○	
Masonry Construction	○	○	○		○	○	○				○	○	○
Window Reveals	○		○	●	○	○	○			○	○	○	

Graphex Insulated Facade System - Graphex 50mm Panel on 20mm Cavity - Acrylic RenderSpec

General

Properties

Graphex Panels have the following material properties:

- Thermal Conductivity: 0.032 W/(mk)
- Thermal Resistivity, R0.69 @40mm, R0.86 @50mm, R1.03 @60mm (The thermal calculations shown are de-rated in accordance with NZS4214)
- Substrate Thickness: 40/50/60mm GRAPHEX Insulation panel
- Total thickness: 45/55/65mm (min/average) coatings and substrate (excluding cavity)
- Weight: approx 7kg/m² coatings and substrate, considered a light weight cladding in terms of NZS3604
- Windzone: All wind zones of 3604

Building Code Compliance

If the project has a building consent then the following clauses apply.

Durability

The work covered by this part of the specification has been designed and constructed to meet the durability performance requirements of NZBC B2.

On Going Maintenance Instructions

Provide ongoing maintenance instructions required to meet the performance requirements of the NZBC.

Substrate

All the appropriate inspections are to be carried out by a BCA representative and that it complies with the NZBC requirements.

Documents

Abbreviations

The following abbreviations are used throughout this work section:

Documents to also refer to where applicable

- NZBC B1 Structure
- NZBC B2 Durability
- NZBC E2 External Moisture
- NZBC F2 Hazardous Building Materials
- AS/NZS 1170.2 Structural design actions - Wind actions
- NZS 3602 Timber and wood-based products for use in building
- NZS 3603 Timber structures standard
- NZS 3604 Timber framed buildings
- BRANZ Bulletin 353 Ground clearances
- BRANZ Bulletin 418 Weathertightness do's and don'ts
- BRANZ Bulletin 439 Condensation risk in walls

Manufacturers Documents

- Resene Construction Systems Technical Resources
- Resene Construction Systems TradeSpec
- Resene Construction Systems Project Guide
- Resene: Total Colour System

Copies of the above relevant company documents referred to in this specification are available at;

Resene Construction Systems
Web: reseneconstruction.co.nz
Telephone: 0800 50 70 40

Resene Paints
Web: resene.co.nz
Telephone: 0800 RESENE (0800 737 363)

No Substitutions

Substitutions are not permitted to any specified Resene Construction Systems system. Materials and execution to Resene Construction Systems specification except where varied by this specification and supported by architectural detailing.

Qualifications

Use only LBP registered plasterers licensed to apply the Resene Construction Systems exterior render systems.

Documentation

Finish Sample

Submit one 300 mm x 300 mm sample of the selected texture finish and colour for approval on request by the main contractor or specifier. Obtain signature of acceptance on sample and return to the Registered Plasterer.

Maintenance Instructions

Provide Resene Construction Systems Maintenance Guide on or before practical completion of the contract for issuing to the building owner. Resene Construction Systems Maintenance Guide to be provided on request.

Producer Statement

If the project has a building consent then a producer statement shall be supplied by the plasterer in the form as required by the BCA.

Health and Safety

Refer to the requirements of the Health and Safety in Employment Act 2015 and Worksafe NZ: Guidelines for the provision of facilities and general safety in the construction industry. If the elimination or isolation of potential hazards and risks is not possible then minimise hazards and risks in this work on site by using the proper equipment and techniques as required in the MPNZA Painters hazard handbook. Supply protective clothing and equipment. Inform employees and others on site of the hazards and put into place procedures for dealing with emergencies. Obtain from Resene Construction Systems the Material Safety Data Sheets for each product. Keep sheets on site and comply with the required safety procedures. Confirmation at the start of the project as to whether a Site Specific Safety Plan is to be produced by the Registered Plasterer prior to works starting.

Warranty

Warrant this system under normal environmental and use conditions against failure. Resene Construction Systems system warranty.

Materials: by Resene Construction Systems - 15 Years Materials only

Execution: by Registered Plasterer - 5 Years Workmanship only

OnSite Assistance

Allow to inspect the whole of the work at each stage. Determine a programme for onsite assistance including notification when each part and stage of the work is ready for inspection prior to the work commencing. Permit representatives of Resene Construction Systems to inspect the work in progress and to take samples of their products from site if requested.

Components

RCS 20mm Graphex Battens

- 40mm x 20mm H-Grade Graphex Peel and Stick Batten
- Supplied in Boxes
- 228 units in a box
- AS 1366 Part 3 Class H (with fire retardant).

Graphex 50mm

- 2400 x 1200
- 50mm Thick
- Allow for 10% Wastage when Installing
- AS 1366 Part 3 Class H (with fire retardant).

Nails (Preloaded) 110mm

- Flat-head, hot-dipped galvanised and 40 mm diameter nylon washers.
- 110mm x 3.55

RCS Drip Edge (Window Heads)

- Supplied in 2400mm Lengths
- Used with both the EdgeSeal Head Flashing and also the Universal Starter Strip

RCS EdgeSeal Head Flashing

- Supplied in 2.4m Lengths
- Generally requires the Drip Edge Flashing

RCS EdgeSeal Window Flashing

- Used for sill and jamb installations
- Supplied in 2400mm lengths

RCS Pre-meshed Corners

- Supplied in 2400mm Lengths

RCS Starter Strip (50mm Clip-On)

- Supplied in 2400mm Lengths
- Suitable for 50mm Substrates
- Allows for a 20mm Cavity

Rockcote PM100 Quick Render Base Coat

- Polymer-modified cement-based dry plaster mix. Supplied in 20 kg bags

[- View Technical Data Sheet](#) - [View Safety Data Sheet](#)

RCS Blue Mesh (1200mm wide)

- Alkali Resistant 6mm x 5mm Weave mesh supplied in 50m rolls

[- View Technical Data Sheet](#)

Rockcote PM100 Quick Render Level Coat

- Polymer-modified cement-based dry plaster mix. Supplied in 20 kg bags

[- View Technical Data Sheet](#) - [View Safety Data Sheet](#)

Rockcote RenderPrime

- Water based acrylic polymer dispersion. Supplied in 15 litre pails.

[- View Safety Data Sheet](#)

Bostik MS Sealant (Tubes)

- 550gm Cartridges

[- View Technical Data Sheet](#) - [View Safety Data Sheet](#)

Rockcote Classico

- 100% acrylic, high-build texture coating. Supplied in 15 Litre pails

[- View Technical Data Sheet](#) - [View Safety Data Sheet](#)

Resene X200 (2 Coats)

- Acrylic reinforced waterproof membrane. Supplied in 4 and 10 litre pails. Tinted to the selected colour

[- View Technical Data Sheet](#) - [View Safety Data Sheet](#)

Installation

The following Resene Construction Systems TradeSpec® Documents can be found at <http://tradespec.co.nz>

All Technical Data Sheets are available at <https://reseneconstruction.co.nz/tds>

All Safety Data Sheets are available at <https://reseneconstruction.co.nz/sds>

- [Building Underlays and Flashing Tapes - Timber Frame - Refer to RCS TradeSpec™ document 1.1](#)
- [Design Information - Refer to RCS TradeSpec™ document 1.2](#)
- [Checking Joinery - Refer to RCS TradeSpec™ document 1.3](#)
- [Light and Heavyweight Fixings - Refer to RCS TradeSpec™ document 1.9](#)
- [Check Timber or Steel Framing - Refer to RCS TradeSpec™ document 2.1](#)
- [Cavity and Batten Installation - Refer to RCS TradeSpec™ document 2.2](#)
- [Fastening EPS / XPS / Graphex board - to timber / steel frame - Refer to RCS TradeSpec™ document 2.3](#)
- [Check and Prepare EPS / Graphex - Refer to RCS TradeSpec™ document 2.9](#)
- [Resene Construction Systems Flashings - Refer to RCS TradeSpec™ document 4.1](#)
- Rockcote PM100 Quick Render Base Coat
- RCS Mesh (Standard Weave)
- Rockcote PM100 Quick Render Levelling Coat
- Rockcote RenderPrime
- Rockcote Classico Texture Finish
- Resene X200 Paint Finish (2 Coats)
- [Light Reflectance Values \(LRV\) - Refer to RCS TradeSpec™ document 1.6](#)
- [Maintenance - Refer to RCS TradeSpec™ document 1.7](#)
- [Cleaning Up - Refer to RCS TradeSpec™ document 5.10](#)

Important:

This specification must be read in conjunction with the Resene Construction Systems technical drawings.

No alteration to the Resene Construction Systems RenderSpec® is permitted.

This Resene Construction Systems RenderSpec® must be read in conjunction with Resene Construction Systems TradeSpec® available at <http://tradespec.co.nz>

All Technical Data Sheets are available at <https://reseneconstruction.co.nz/tds>

All Safety Data Sheets are available at <https://reseneconstruction.co.nz/sds>

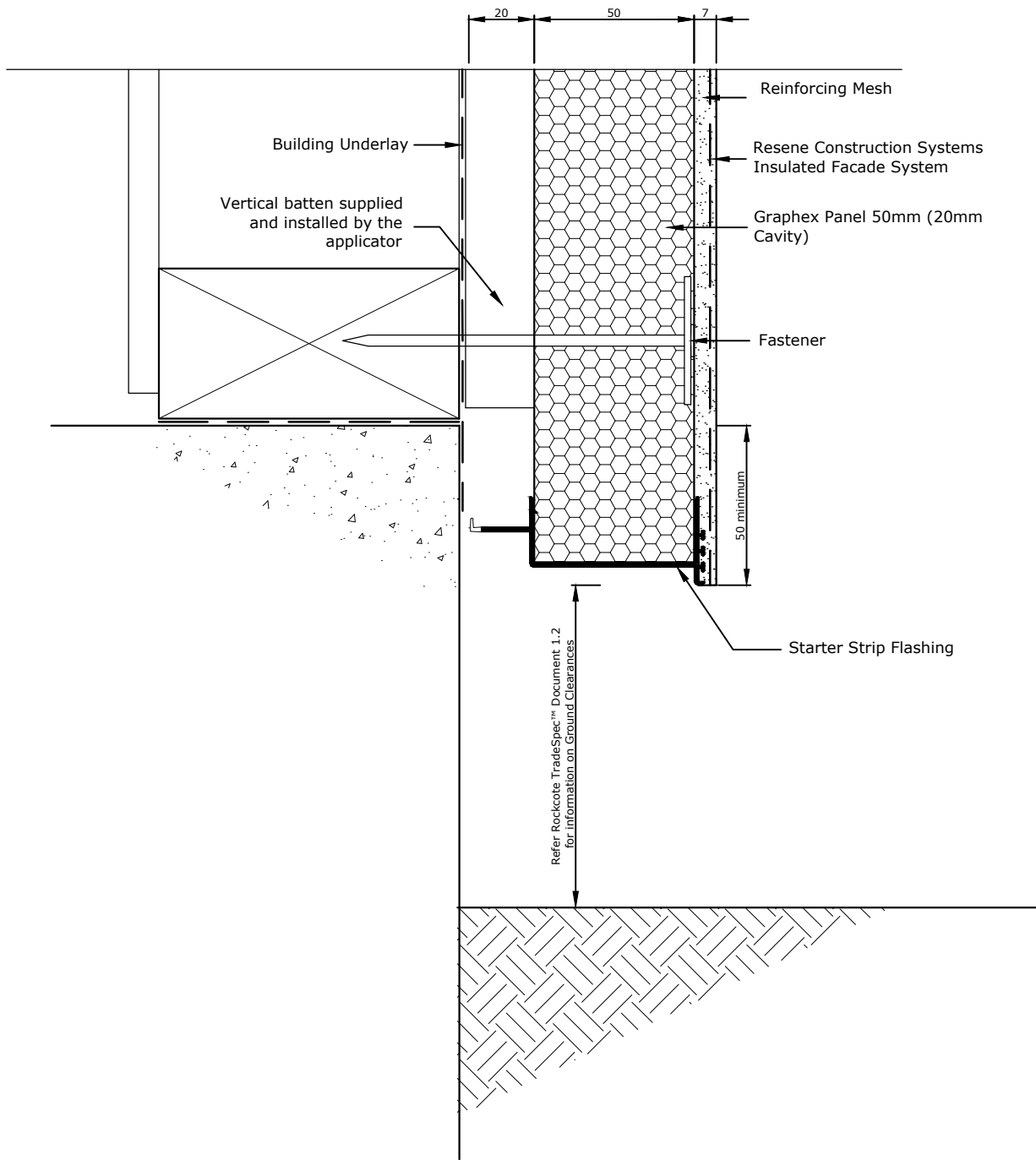


Graphex Insulated Facade System

Technical Drawings

Foundation
Recessed Foundation
External Corner
Internal Corner
Window Sill
Window Jamb
Window Head
Soffit
Roof Apron
Vertical Control Joint
Meter Box

Further details are available on our website www.reseneconstruction.co.nz



Refer TradeSpec™ Document 1.2 for information on Ground Clearances

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System
 Insulated Facade System

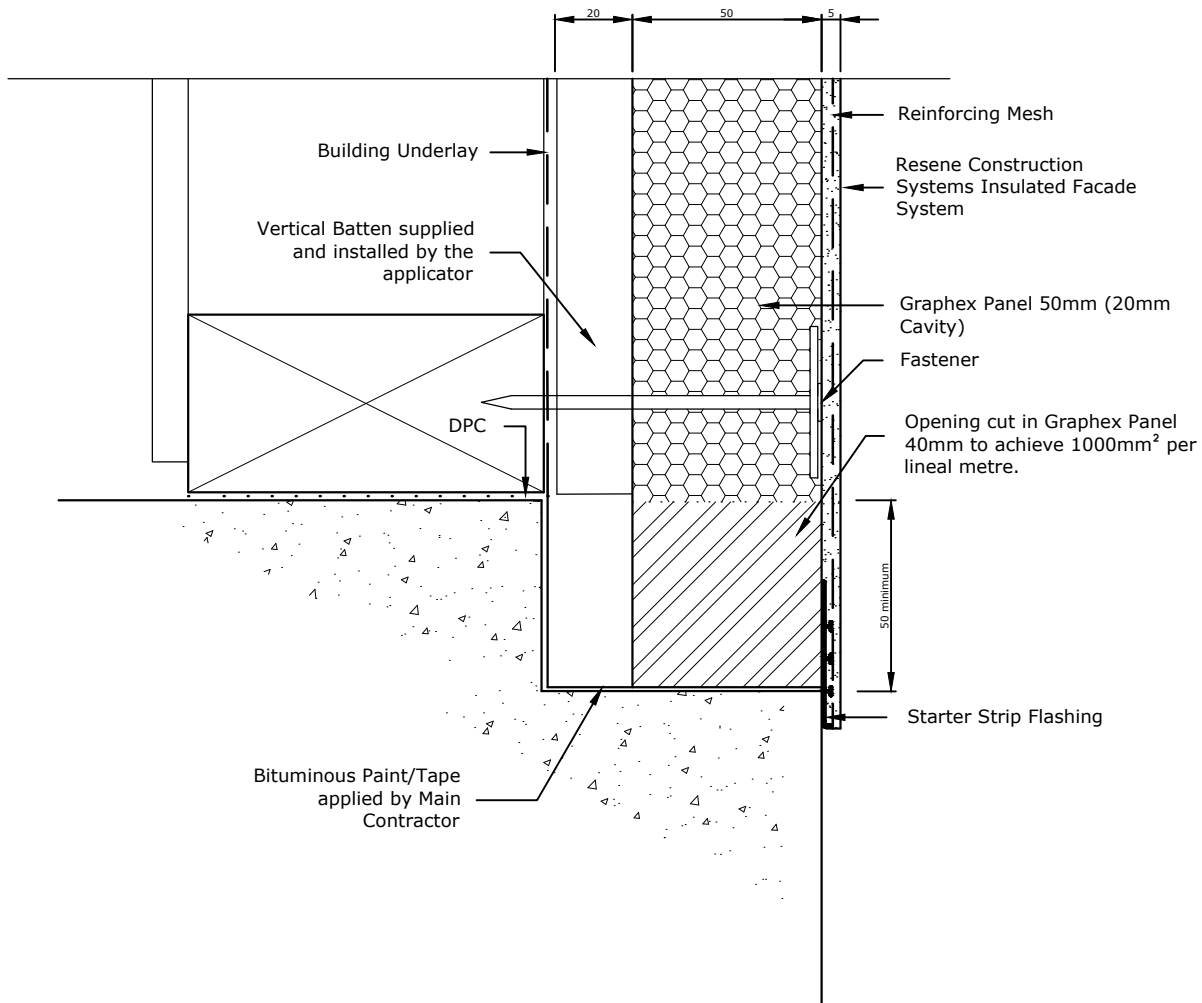
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Foundation

Scale
 1 : 2 @ A4

Date
 1 November 2017

Sheet
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Refer to NZBC E2/AS1 for information on Ground Clearances

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System
 Insulated Facade System

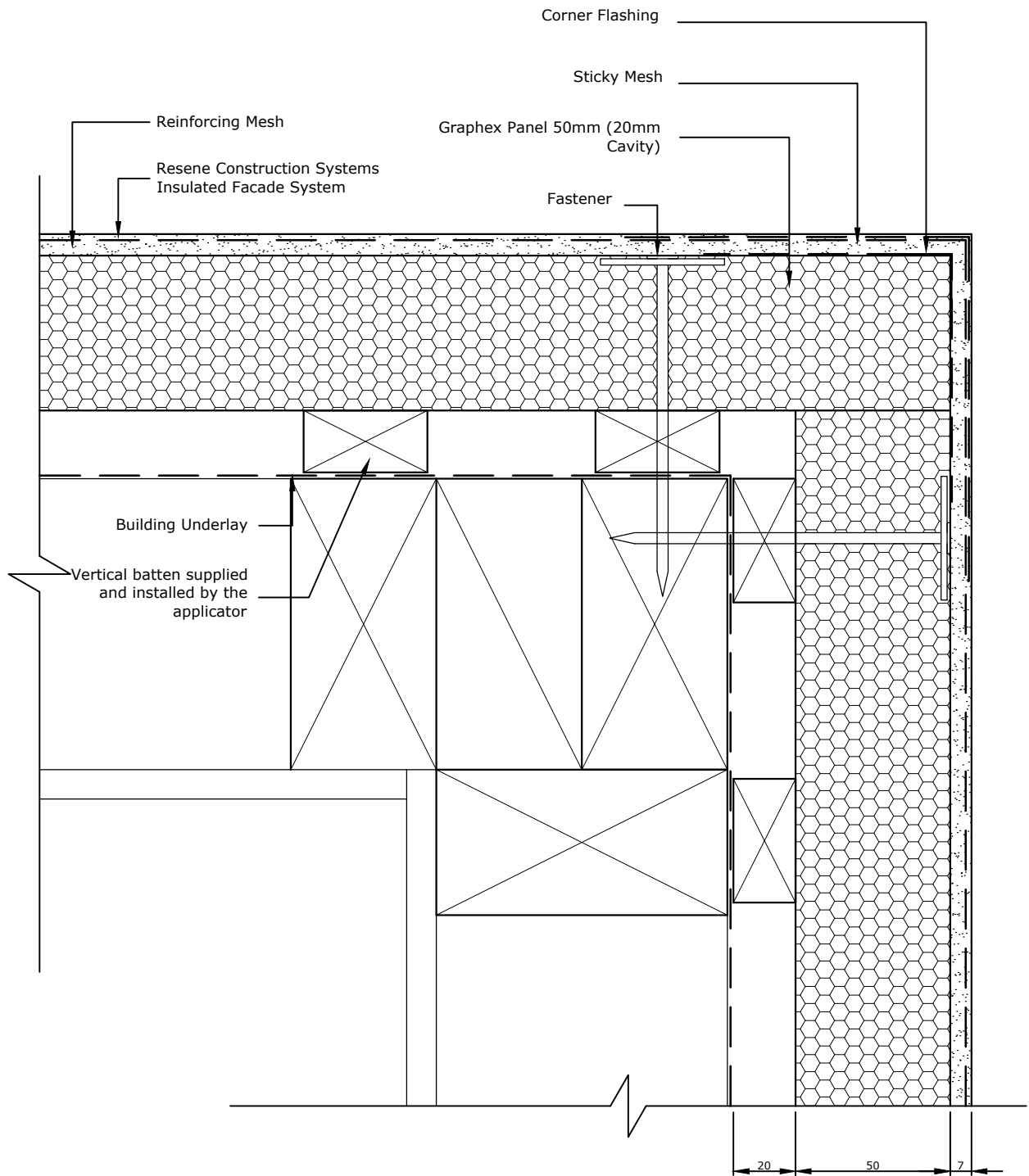
Scale
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Substrate
 Graphex Panel 50mm (20mm Cavity)

Date
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Drawing Name
 Recessed Foundation - Option 3

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System
 Insulated Facade System

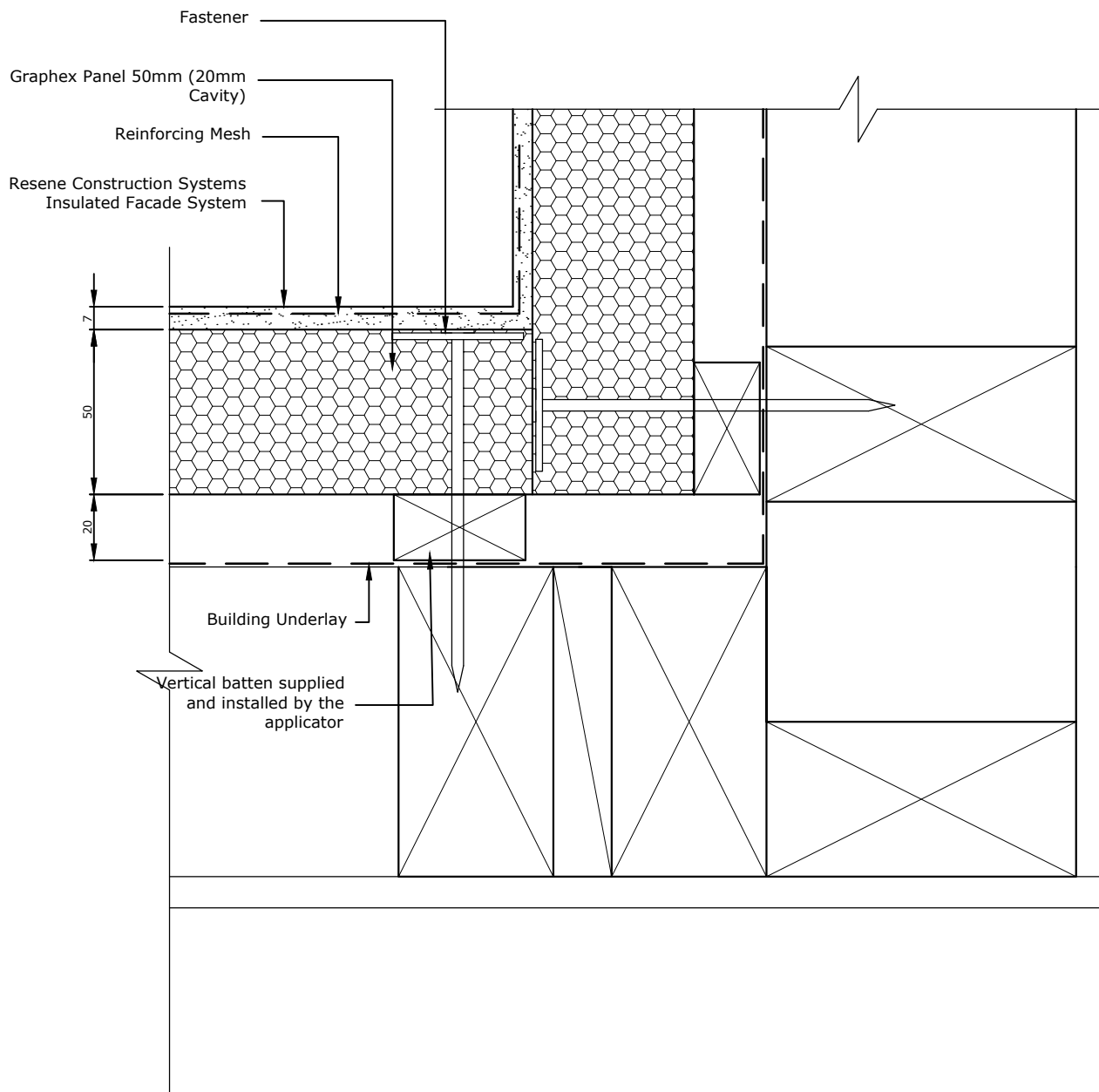
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 External Corner

Scale
 1 : 2 @ A4

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System
 Insulated Facade System

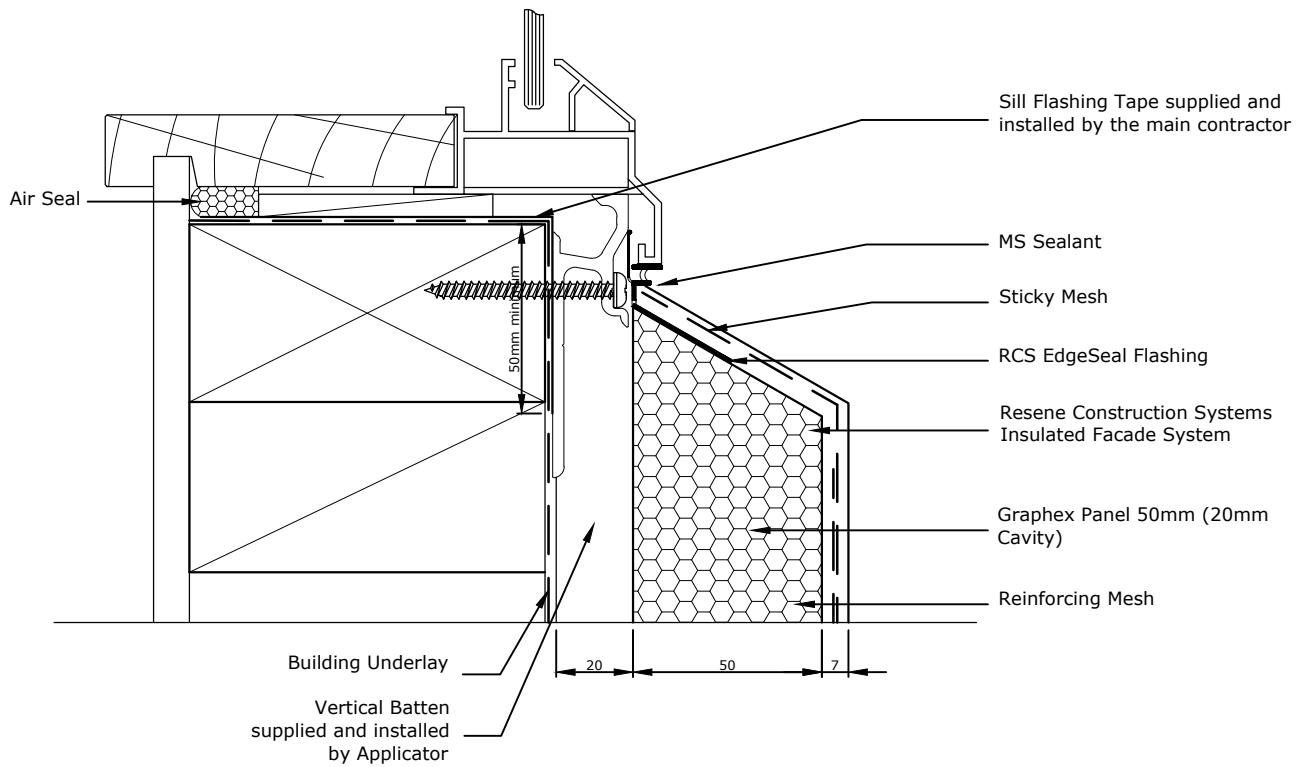
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Internal Corner

Scale
 1 : 2 @ A4

Date
 1 November 2017

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 71.04.00



Allow a 25mm Gap between the back of the joinery and external facing timber framing to allow the sill flashing to fit.

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System
 Insulated Facade System

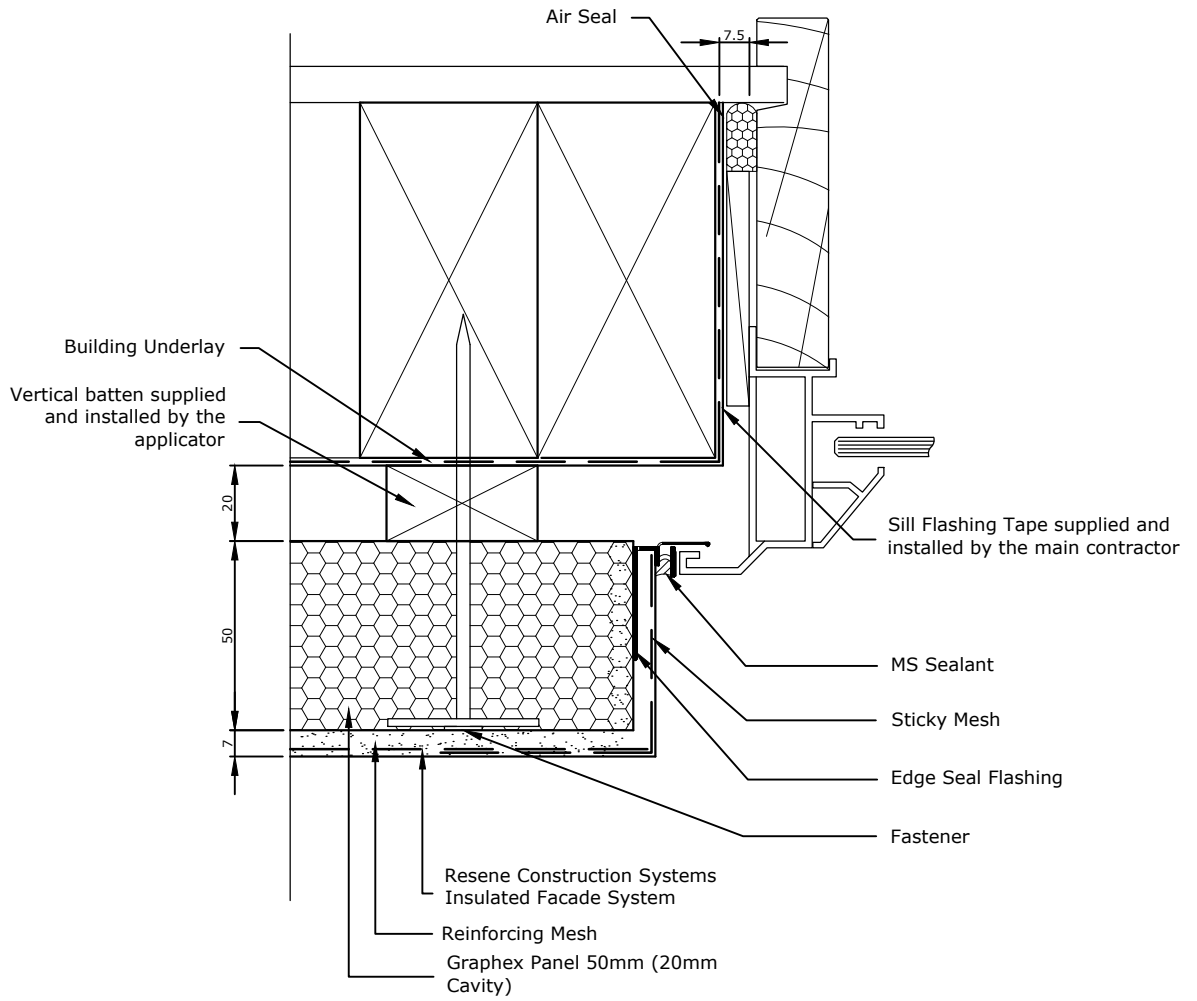
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Window Sill

Scale
 1 : 2 @ A4

Date
 1 November 2017

Sheet
 71.05.00



Allow a 25mm Gap between the back of the joinery and external facing timber framing to allow the jamb flashing to fit.

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System
 Insulated Facade System

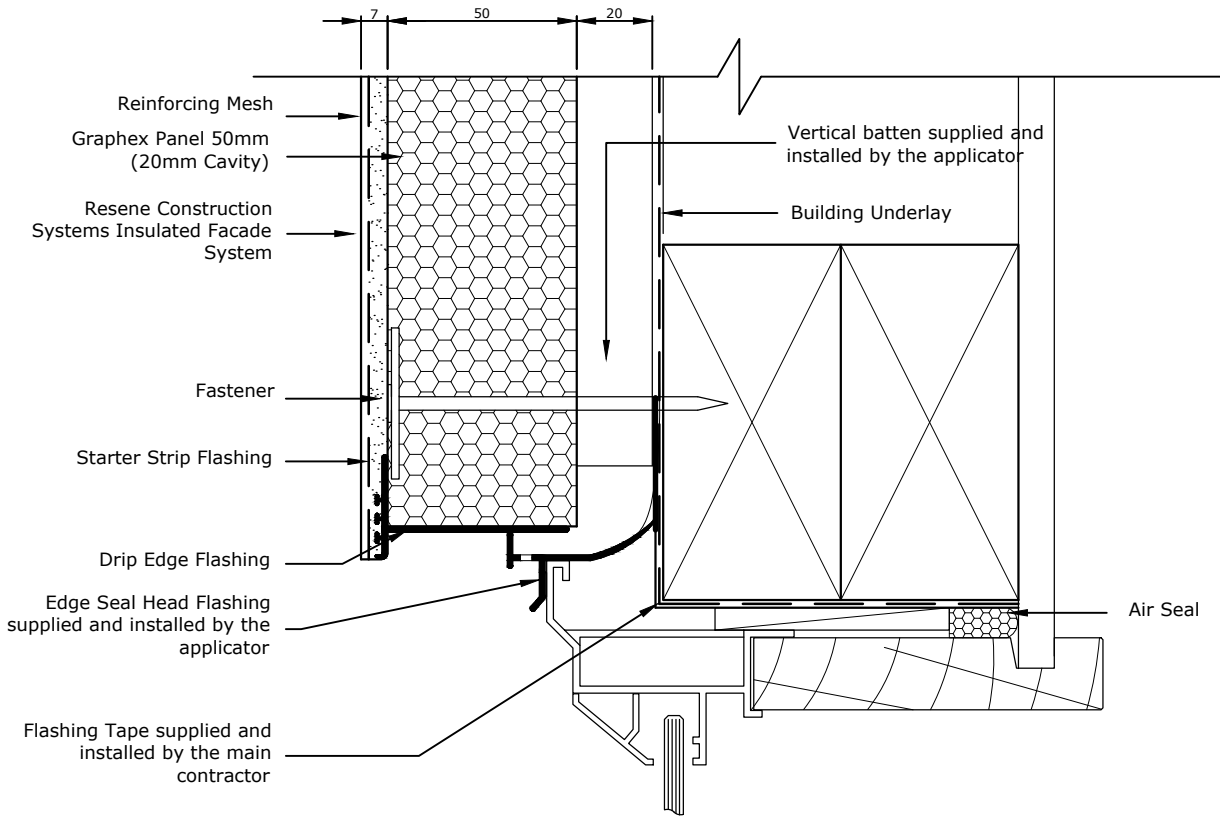
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Window Jamb

Scale
 1 : 2 @ A4

Date
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 71.06.00



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System
 Insulated Facade System

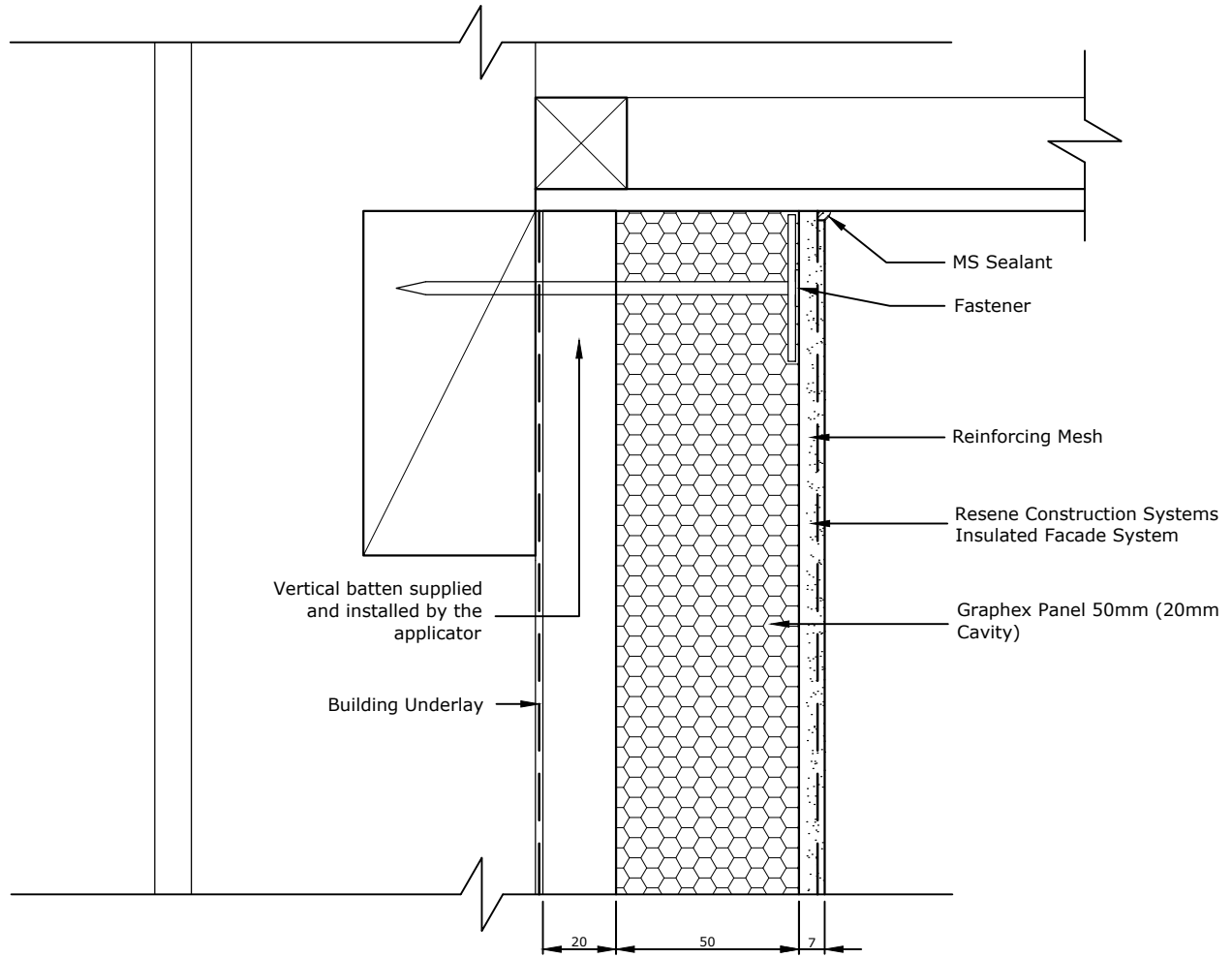
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Window Head - Option 1

Scale
 1 : 2 @ A4

Date
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 71.07.00



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System
Insulated Facade System

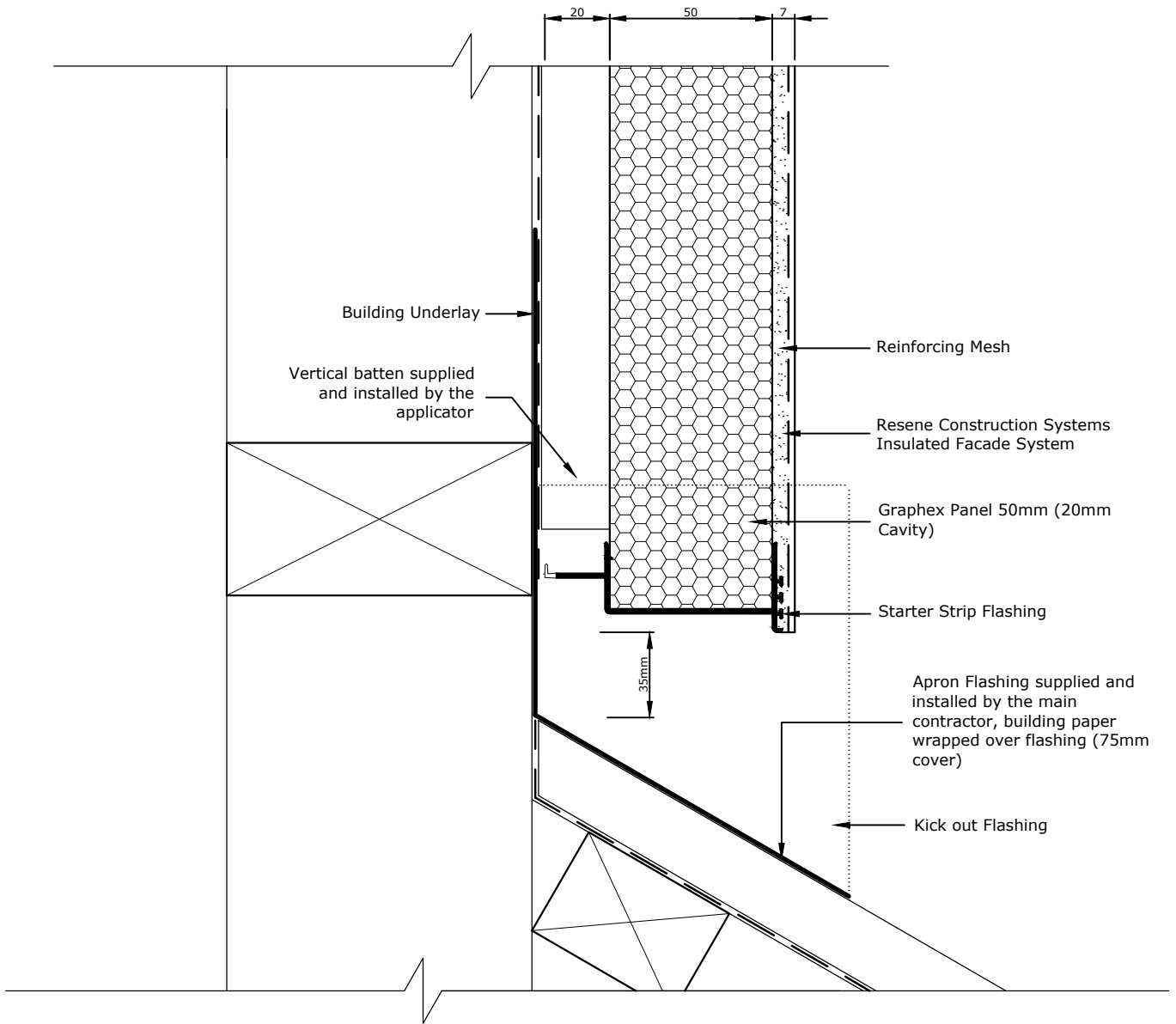
Substrate
Graphex Panel 50mm (20mm Cavity)

Drawing Name
Soffit

Scale
1 : 2 @ A4

Date
1 November 2017

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Refer TradeSpec™ Document 1.2 for information on Roof Clearances

Metal flashing must be taped to the Building Underlay by the main contractor/window installer

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System
 Insulated Facade System

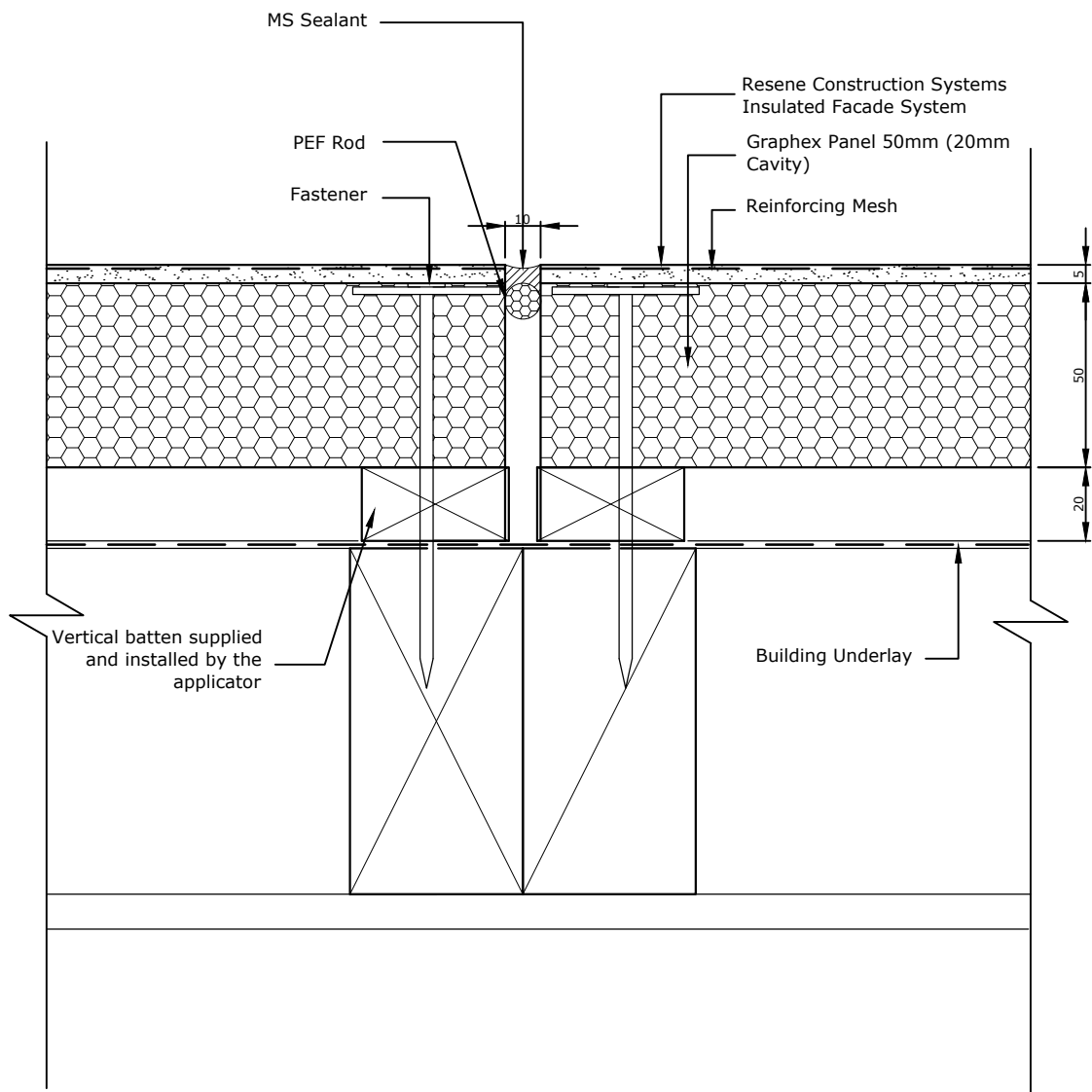
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Roof Apron

Scale
 1 : 2 @ A4

Date
 1 November 2017

Sheet
 71.09.00



All Control Joint spacings and setouts are the responsibility of the Designer, for suggested locations refer to TradeSpec™ Document 1.4

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System
 Insulated Facade System

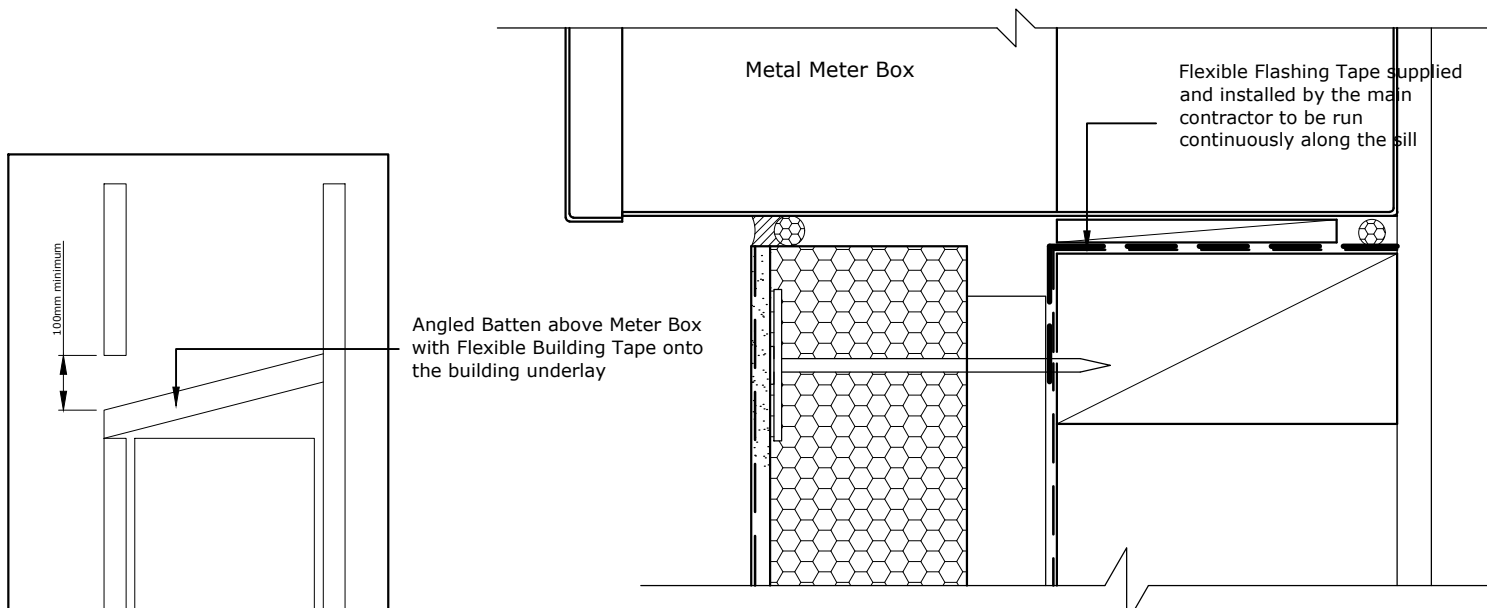
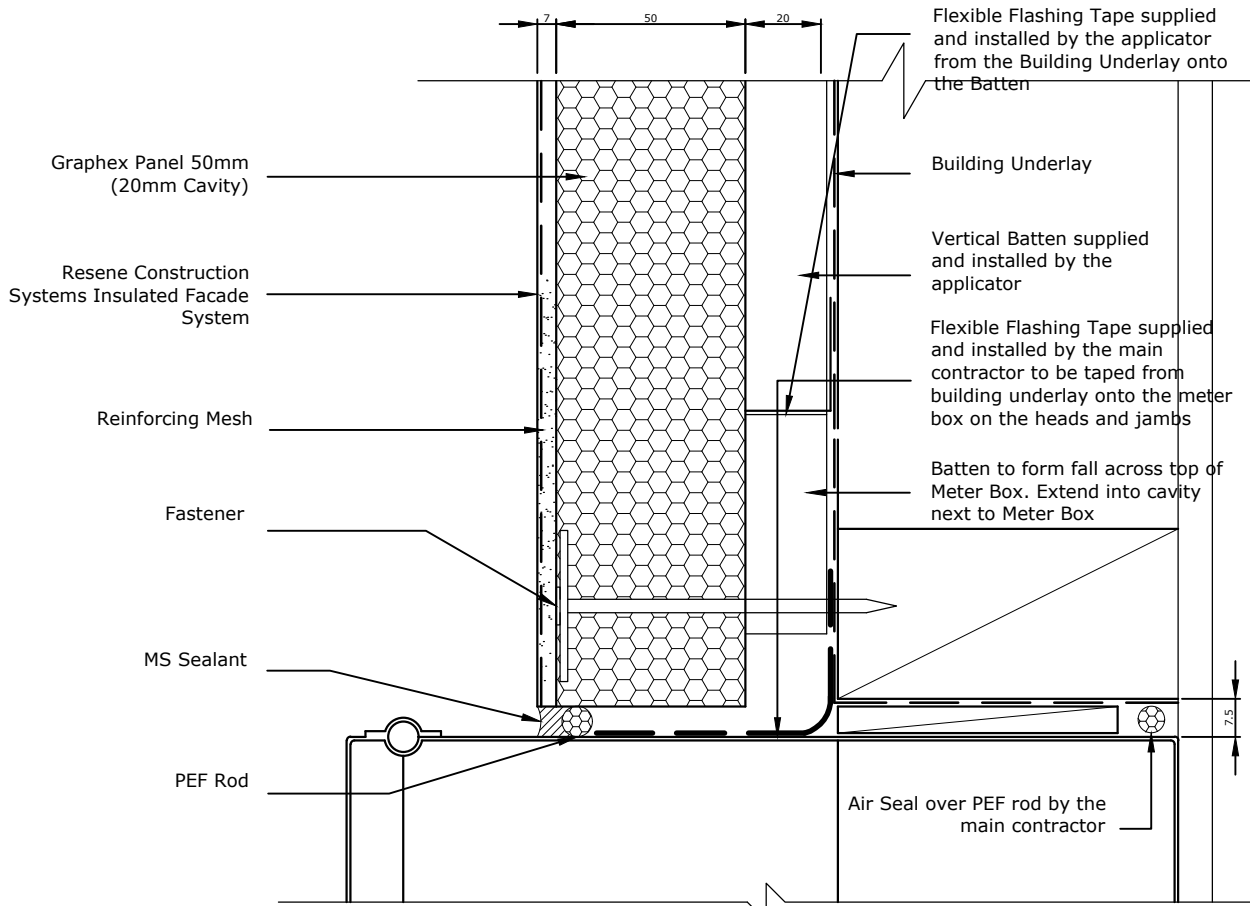
Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Vertical Control Joint - Option 1

Scale
 1 : 2 @ A4

Date
 1 November 2017

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The responsibility for the penetration is the responsibility of the main contractor, where possible and practical use a flange.

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System
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Substrate
 Graphex Panel 50mm (20mm Cavity)

Drawing Name
 Meter Box Penetration - Option 1

Scale
 1 : 2 @ A4

Date
 1 November 2017

Sheet
 71.12.10

Resene Construction Systems.

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The Resene Construction Systems network is New Zealand wide from Keri Keri in the North to Invercargill in the South.

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www.reseneconstruction.co.nz

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