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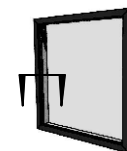
All dimensions are in millimetres where shown. Do not scale.

NOTES:

1. External weather seal to be either Tremco-Ilbruck joint sealing tape sized to suit finished joint size or ARBOSIL 1090 silicone seal and polyethelene backing rod.
2. Fixings and brackets to be installed strictly in accordance with Rational installation guidance.
3. Fixing grounds must be able to withstand all loads transmitted from and through the Rational system.

primary weather line

primary air barrier line



Rev	Date	By	Description

Title:

Rational AURA
TYPICAL JAMB DETAIL
brick/block masonry

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.01.A.J.001

Drawn: Studio62

Status: approved

Revision:

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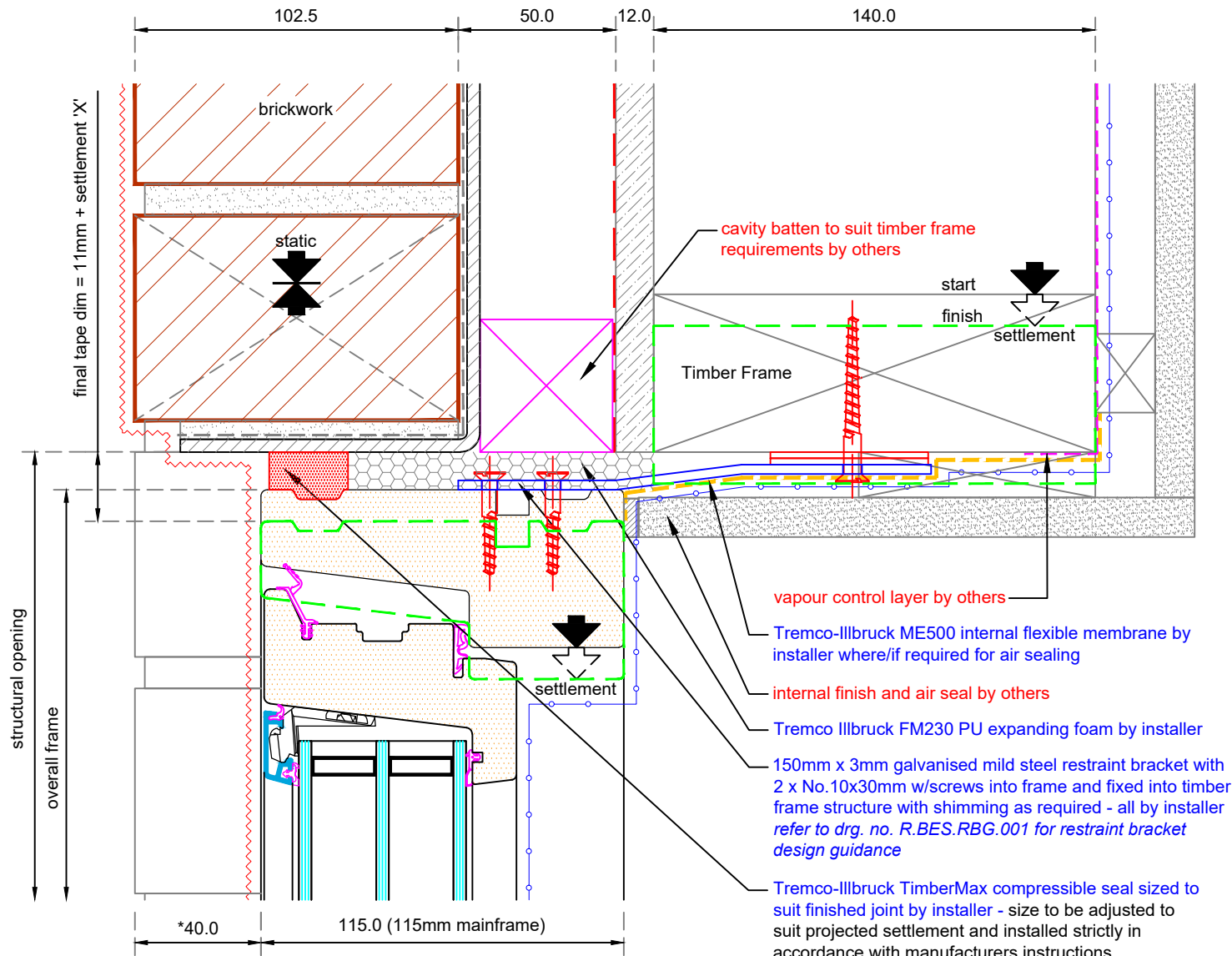
Rational Windows (UK) Ltd.
7 Avonbury Business Park, Howes Lane,
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tel: 01869 248181

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settlement 'X' per storey (up to 5 stories)		
location	using solid timber joist floors (mm)	using engineered i-joist floors (mm)
ground storey	3	3
first storey	12	9
second storey	21	15
third storey	30	21
fourth storey	39	27
fifth storey	48	33

Source: LABC warranty technical manual v.7

NOTES:



- *window setback dimension to be adjusted to ensure that required Tremco Ilbruck tape width does not encroach over timber frame structure - refer to manufacturers literature for tape size in relation to storey settlement
- timber frame insulation omitted for clarity
- window fixings must be to timber frame only, NOT to external structure/finish which remains static during settlement
- data in adjacent table is to be used in absence of project specific calculations and assumes use of timber with moisture content of less than 20% bearing on concrete ground floor

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 primary air barrier line



Rev	Date	By	Description

Title:

Rational AURA
TYPICAL HEAD DETAIL
brick/timber frame

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.01.B.H.001

Drawn: Studio62

Status: approved

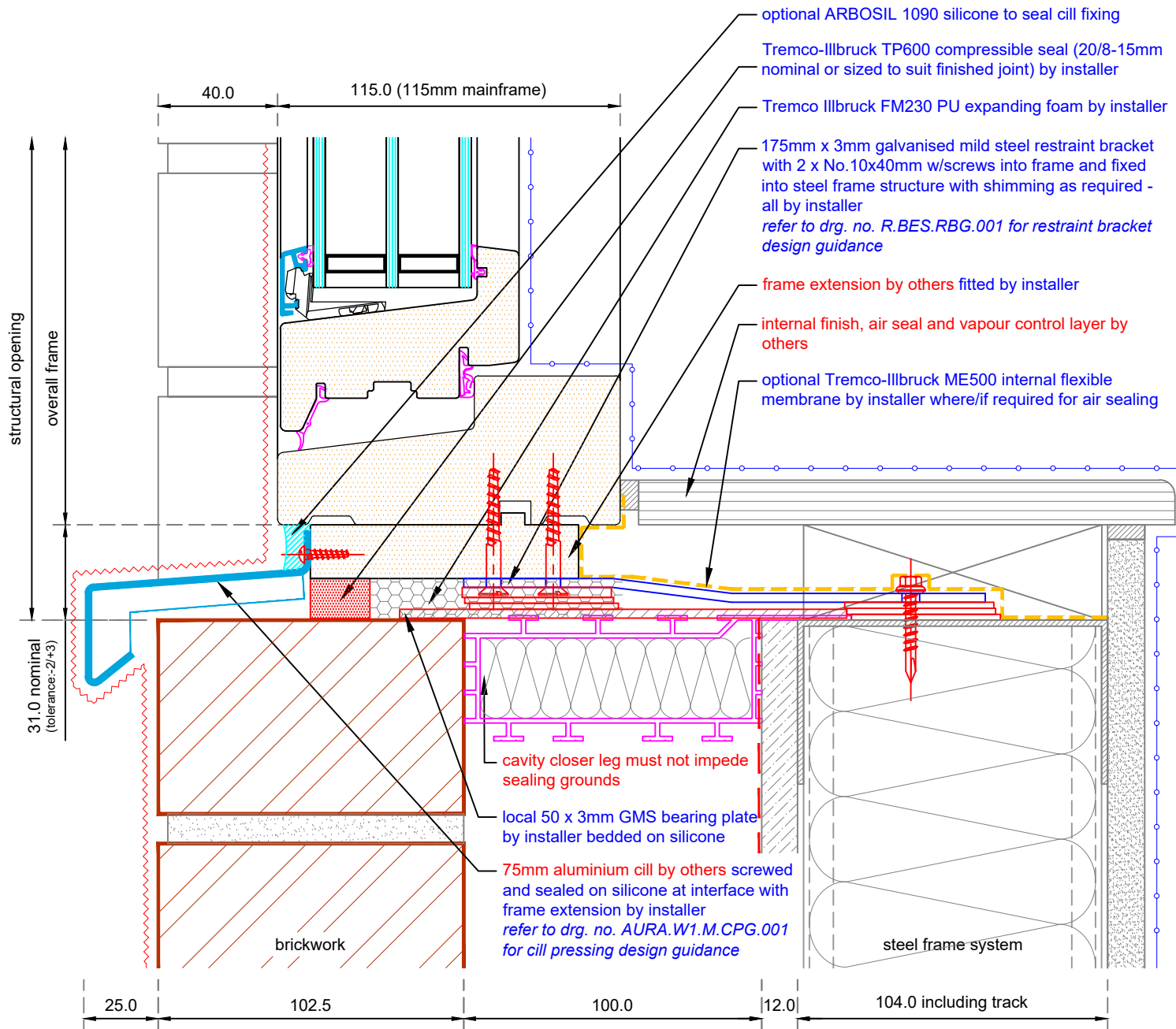
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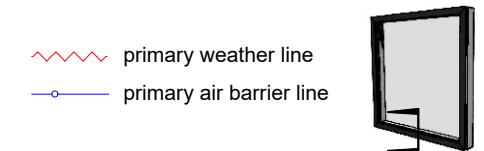


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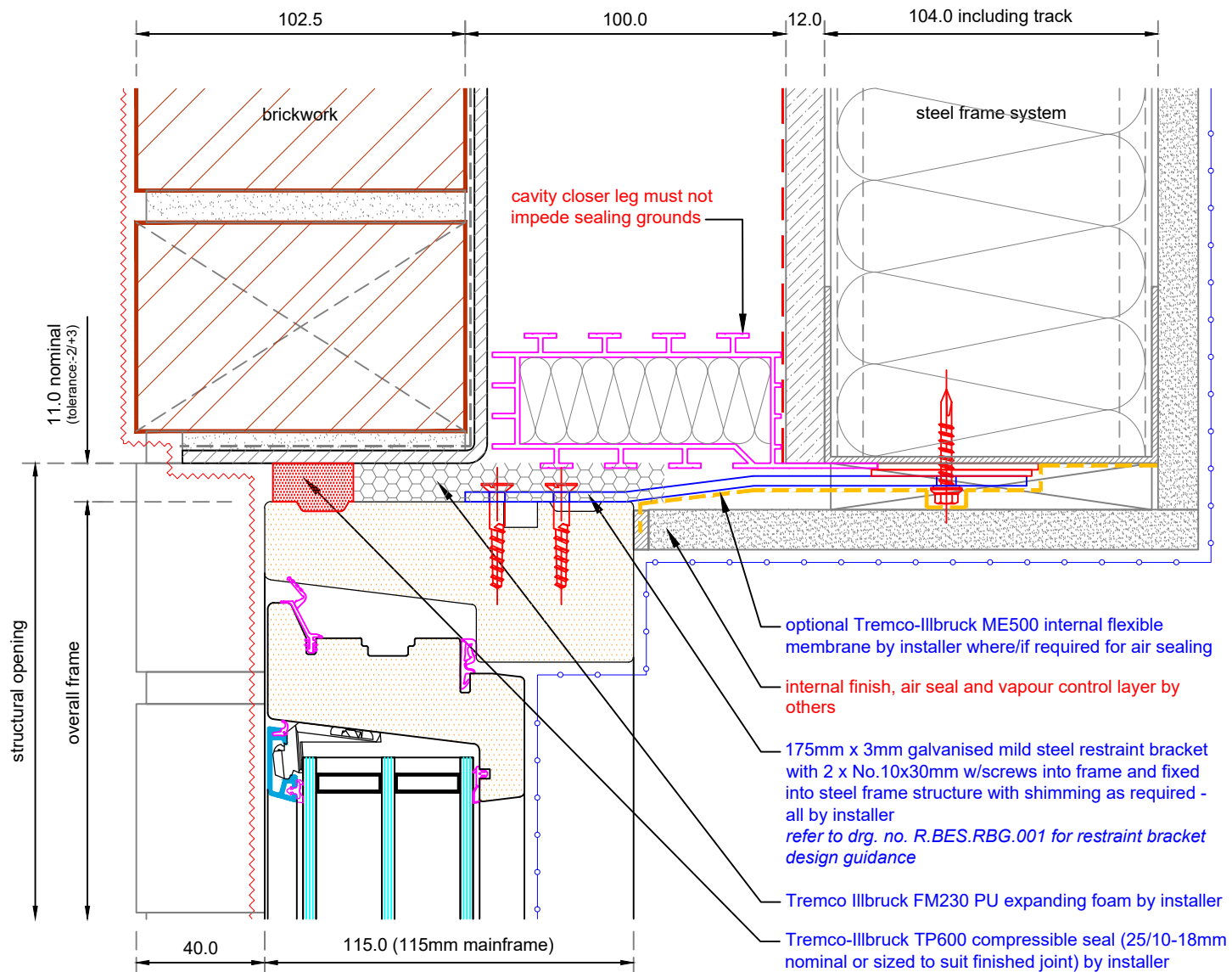
Title:
Rational AURA
TYPICAL CILL DETAIL
brick/steel frame system

Scale: 1:2 approx @ A4	Drawing no:
Date: January 2017	AURA.W1.01.C.C.001
Drawn: Studio62	Revision:
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NOTE: cavity wall insulation omitted for clarity




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 primary weather line

 primary air barrier line



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Rational AURA
TYPICAL HEAD DETAIL
brick/steel frame system

Scale: 1:2 approx @ A4

Date: January 2017

Drawn: Studio62

Status: approved

Drawing no:

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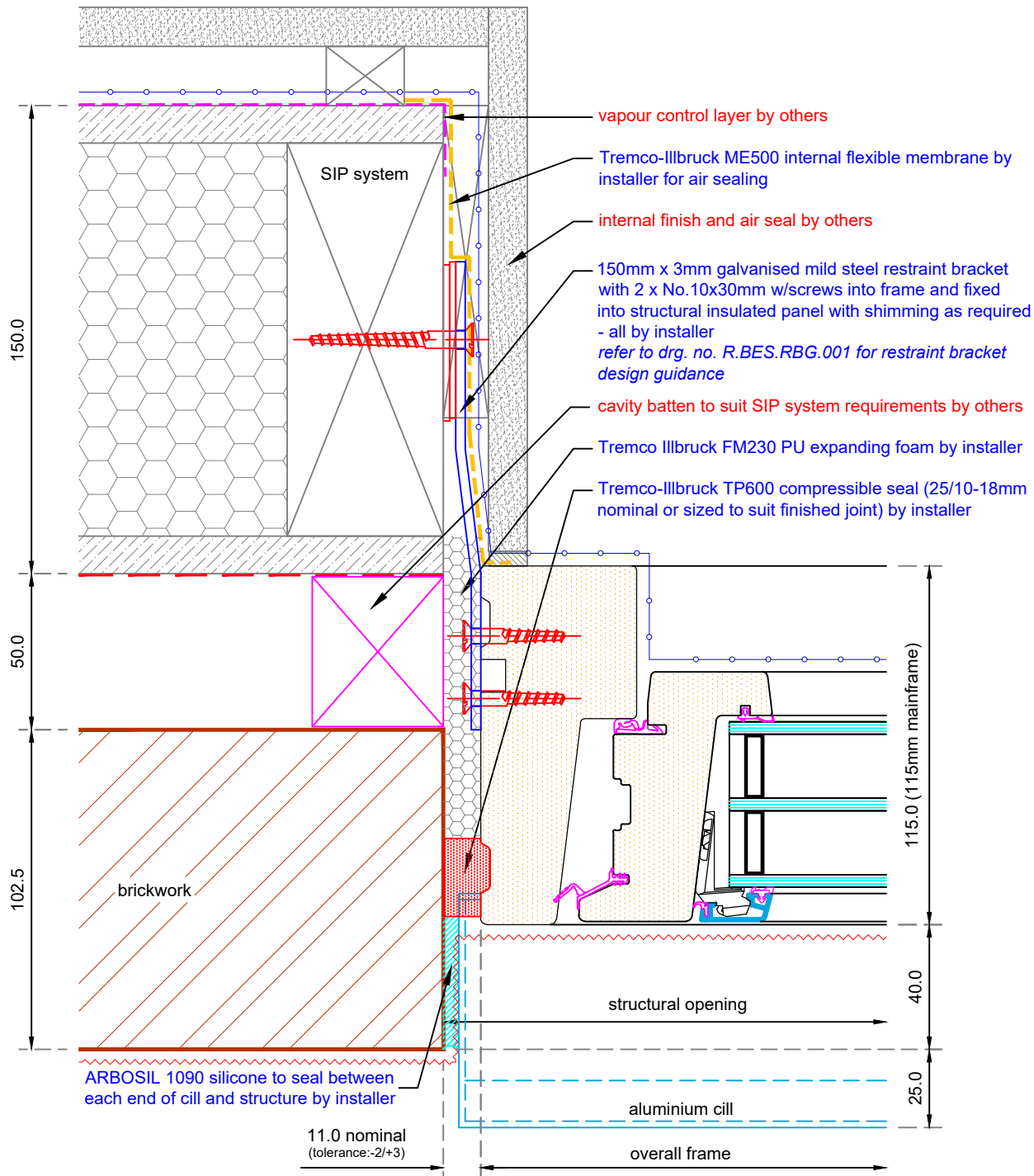
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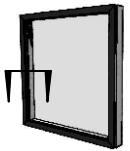
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 -o- primary air barrier line



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| Rev | Date | By | Description |
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Title:  
 Rational AURA  
**TYPICAL JAMB DETAIL**  
 brick/structural insulated panel

|                        |                    |
|------------------------|--------------------|
| Scale: 1:2 approx @ A4 | Drawing no:        |
| Date: January 2017     | AURA.W1.01.D.J.001 |
| Drawn: Studio62        | Revision:          |
| Status: approved       |                    |

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Technical cross-section drawing of a window installation, showing structural details, insulation, and various components. The drawing includes dimensions and labels for different parts of the assembly.

**Dimensions:**

- Horizontal dimensions: 60.0, 115.0 (115mm mainframe), 25.0, 110.0, 190.0
- Vertical dimensions: 31.0 nominal (tolerance: -2/+3), overall frame

**Labels and Components:**

- structural opening
- overall frame
- 31.0 nominal (tolerance: -2/+3)
- insulation fixings installed by others to manufacturers recommendations
- insulated render system - constructed by others to manufacturers recommendations PRIOR TO INSTALLATION OF RATIONEL WINDOW
- 95mm aluminium cill by others screwed and sealed on silicone at interface with frame extension by installer refer to drg. no. AURA.W1.M.CPG.001 for cill pressing design guidance
- blockwork
- Tremco Illbruck FM230 PU expanding foam by installer
- 150mm x 3mm galvanised mild steel restraint bracket with 2 x No.10x40mm w/screws into frame and plugged and screwed into structure with shimming as required - all by installer refer to drg. no. R.BES.RBG.001 for restraint bracket design guidance
- frame extension by others fitted by installer
- internal finish, air seal and vapour control layer by others
- optional Tremco-Illbruck ME500 internal flexible membrane by installer where/if required for air sealing



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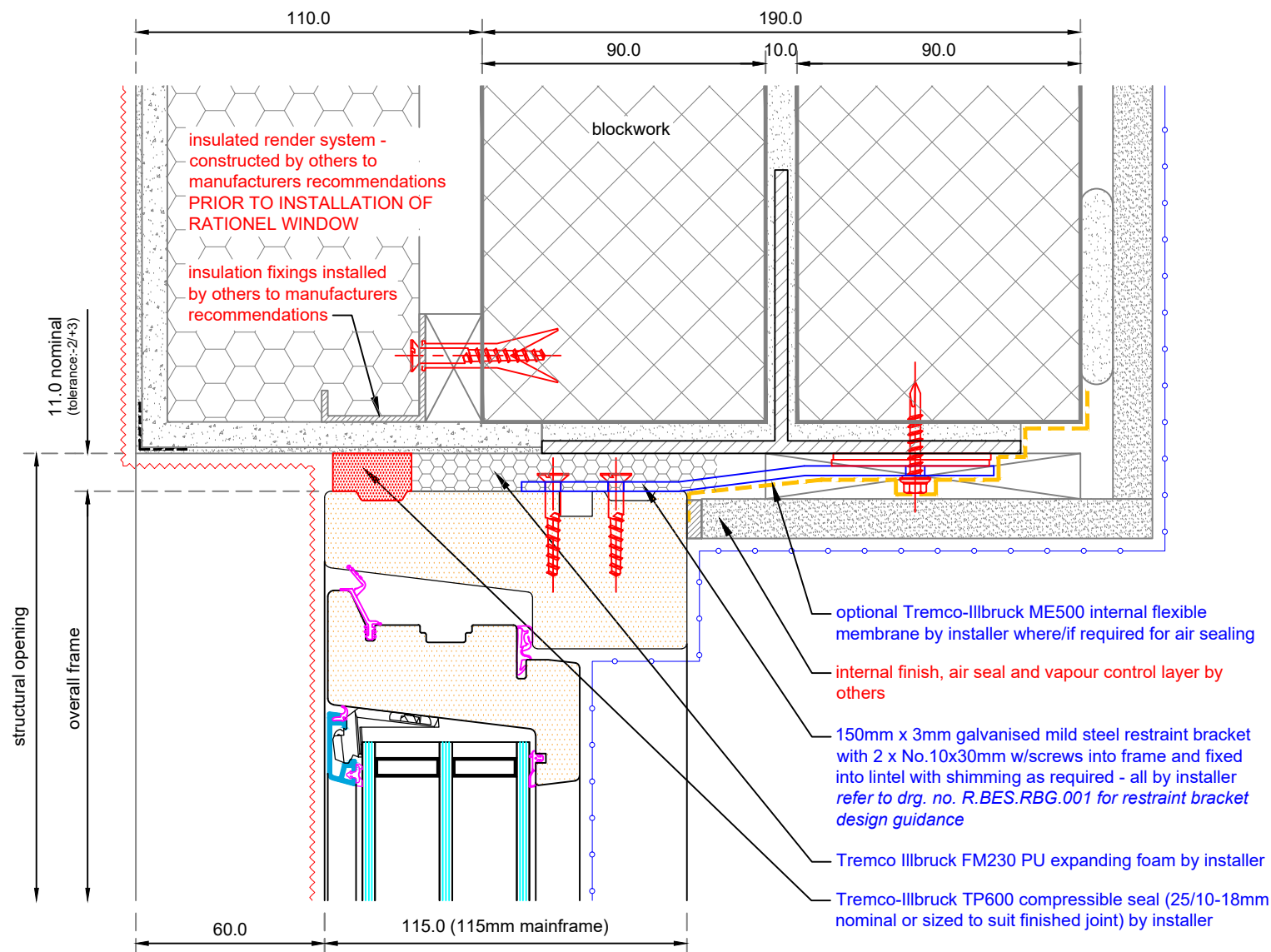
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~~~~~ primary weather line

—○— primary air barrier line



| Rev | Date | By | Description |
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Title:

Rationel AURA
TYPICAL HEAD DETAIL
insulated render/block masonry

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.02.A.H.001

Drawn: Studio62

Status: approved

Revision:

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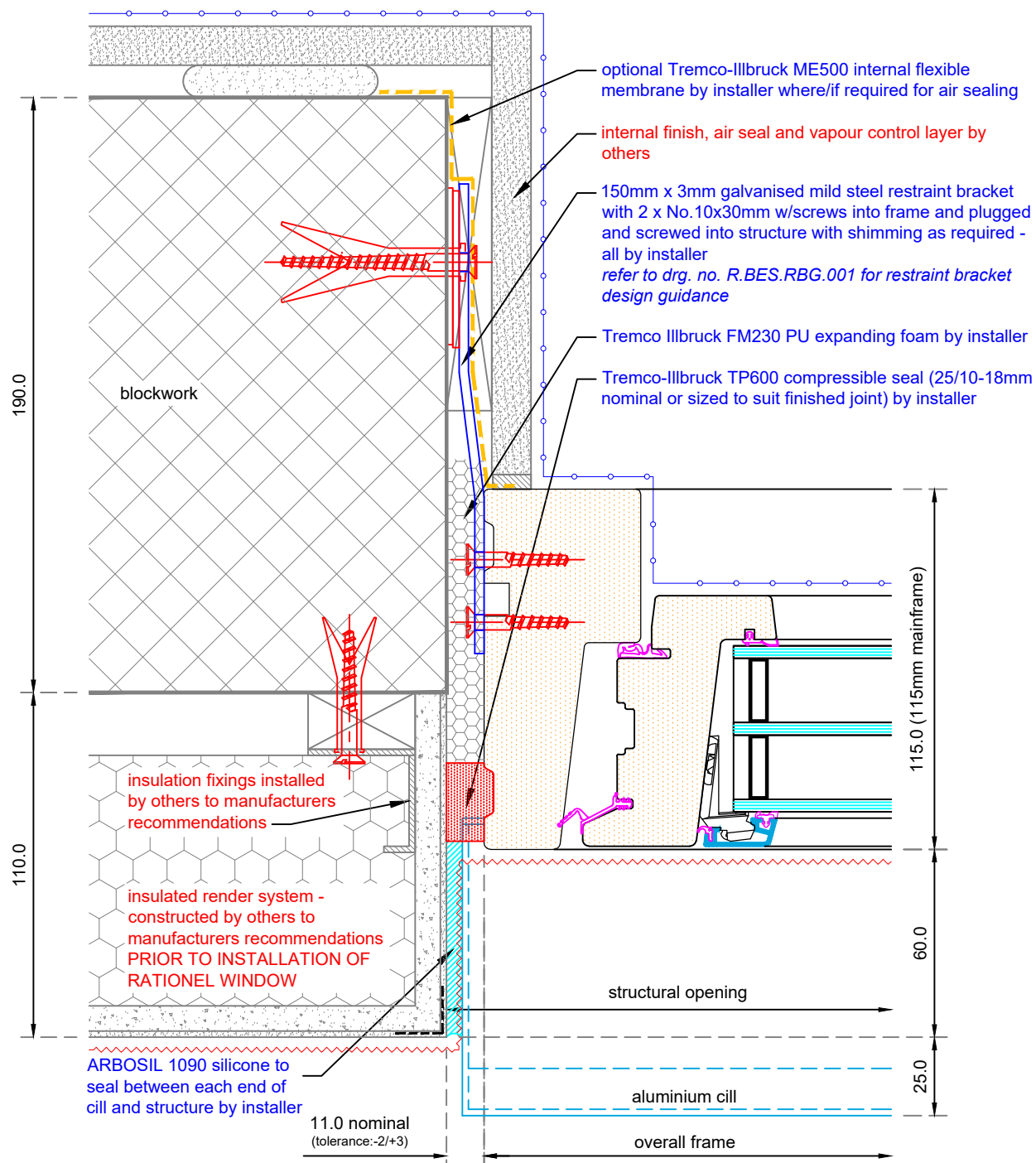
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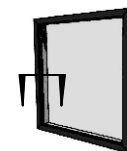
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Scale: 1:2 approx @ A4

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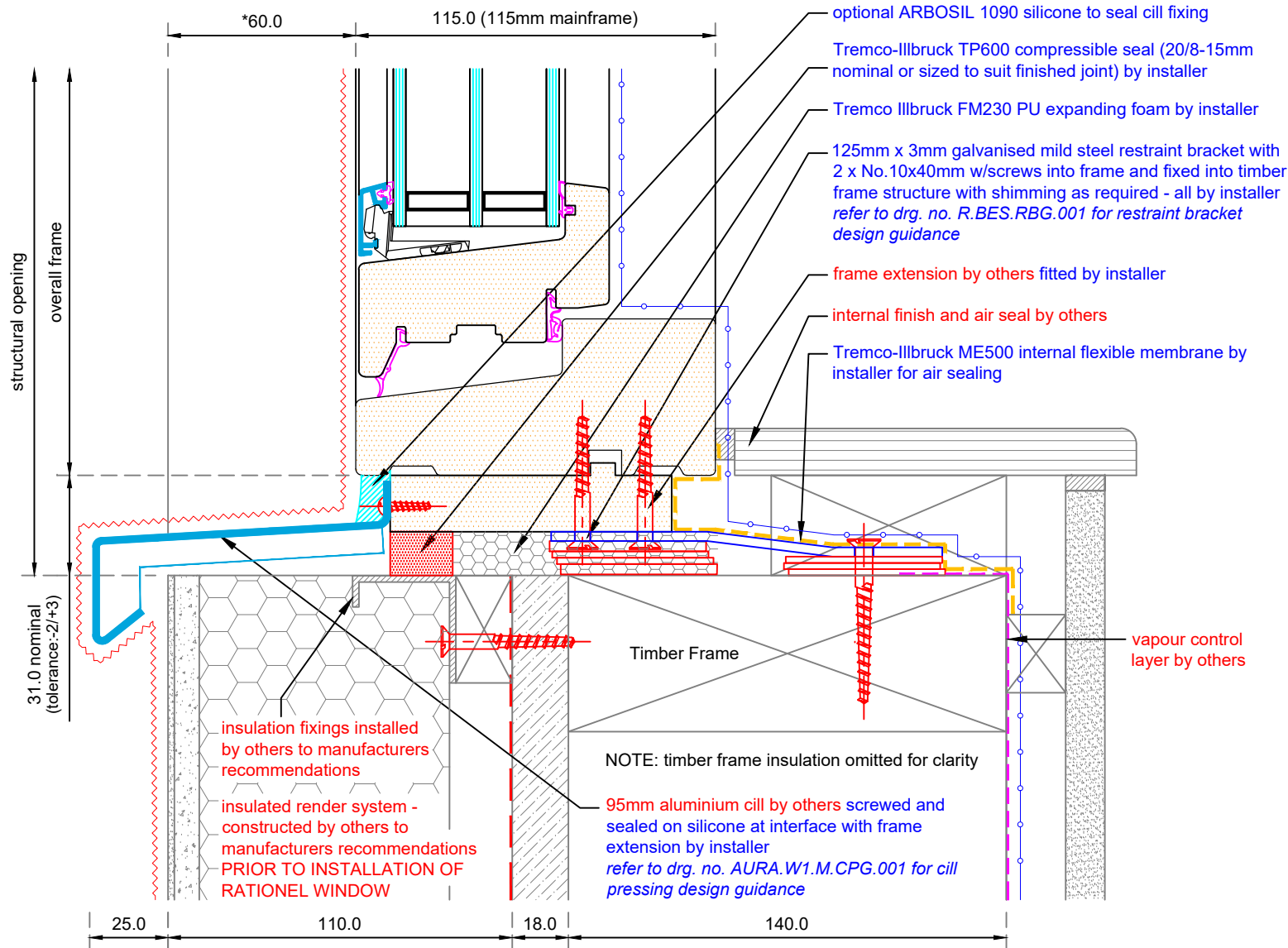
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\*where smaller setback is required,  
please reconsider structural support  
for the window load



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Title:

Rational AURA  
**TYPICAL CILL DETAIL**  
insulated render/timber frame

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.02.B.C.001

Drawn: Studio62

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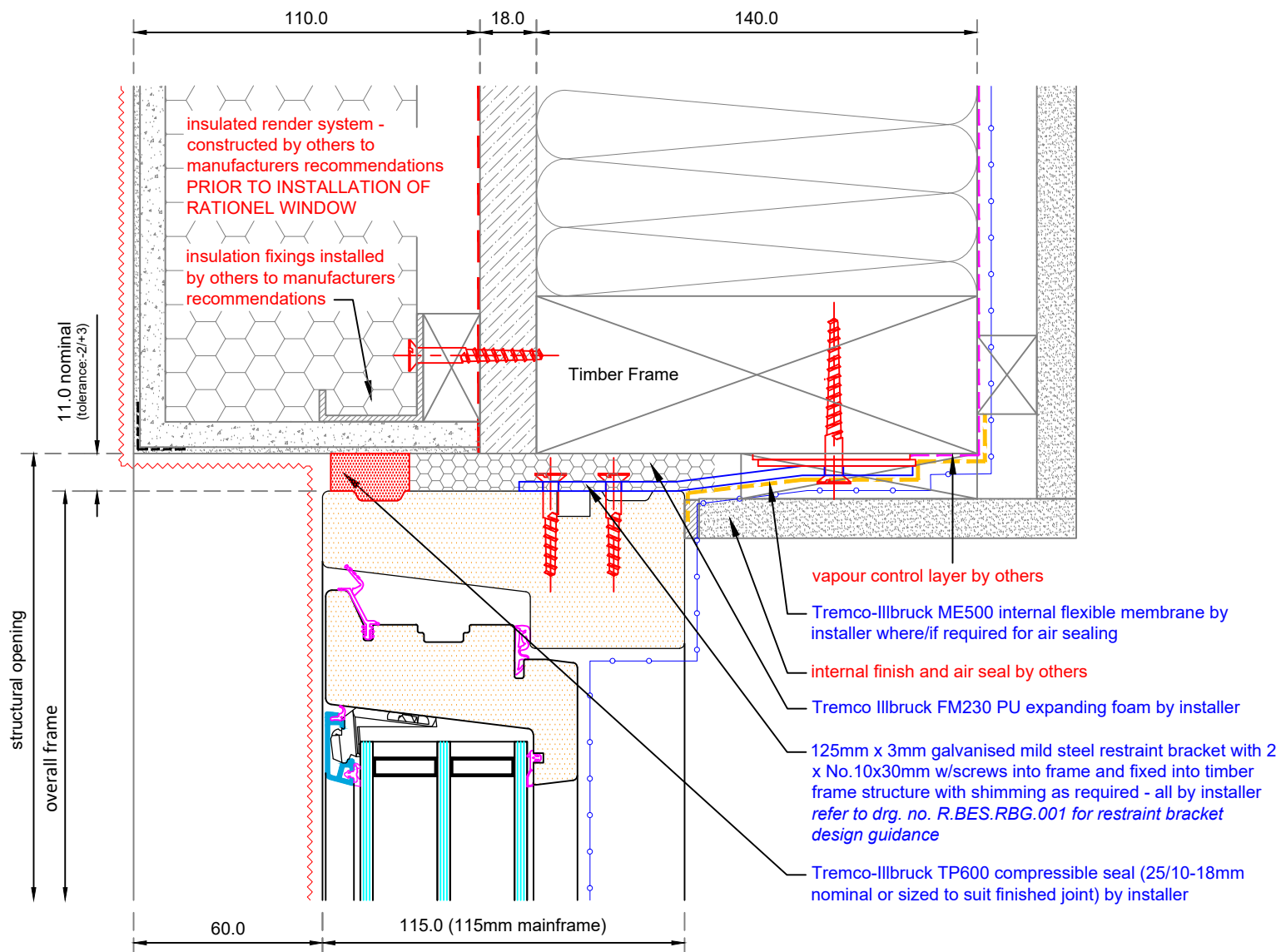
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#### PLEASE NOTE:

this detail assumes there is no differential movement between the external building finish and the structural timber frame i.e. - external finish is fixed directly to timber frame and any required movement joints are outside of the window zone.





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Title:

Rationel AURA
TYPICAL HEAD DETAIL
insulated render/timber frame

Scale: 1:2 approx @ A4

Drawing no:

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AURA.W1.02.B.H.001

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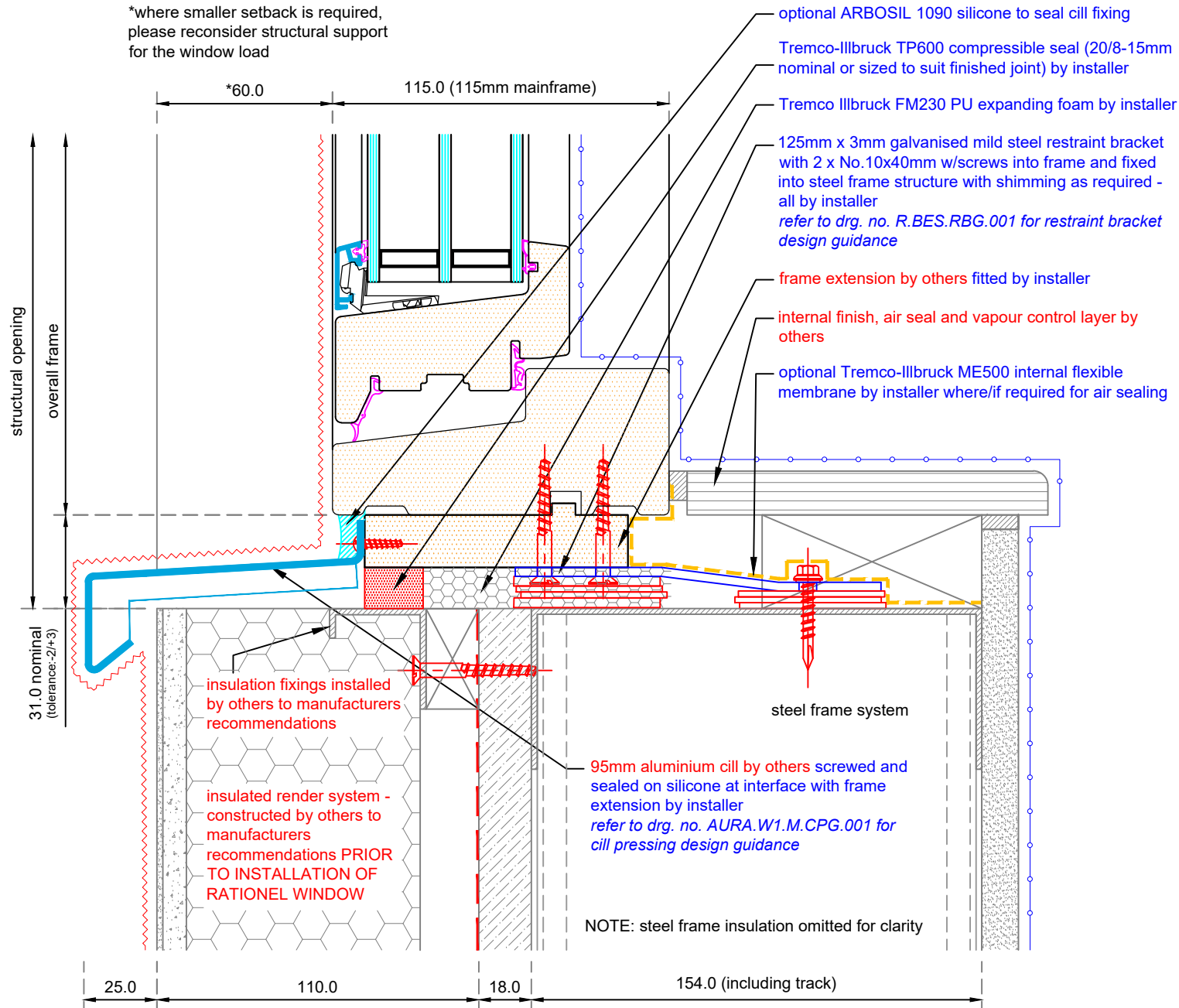
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~ ~ ~ ~ ~ primary weather line
- - - - - primary air barrier line



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| Rev | Date | By | Description |
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Title:

Rational AURA
TYPICAL CILL DETAIL
insulated render/steel frame system

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.02.C.C.001

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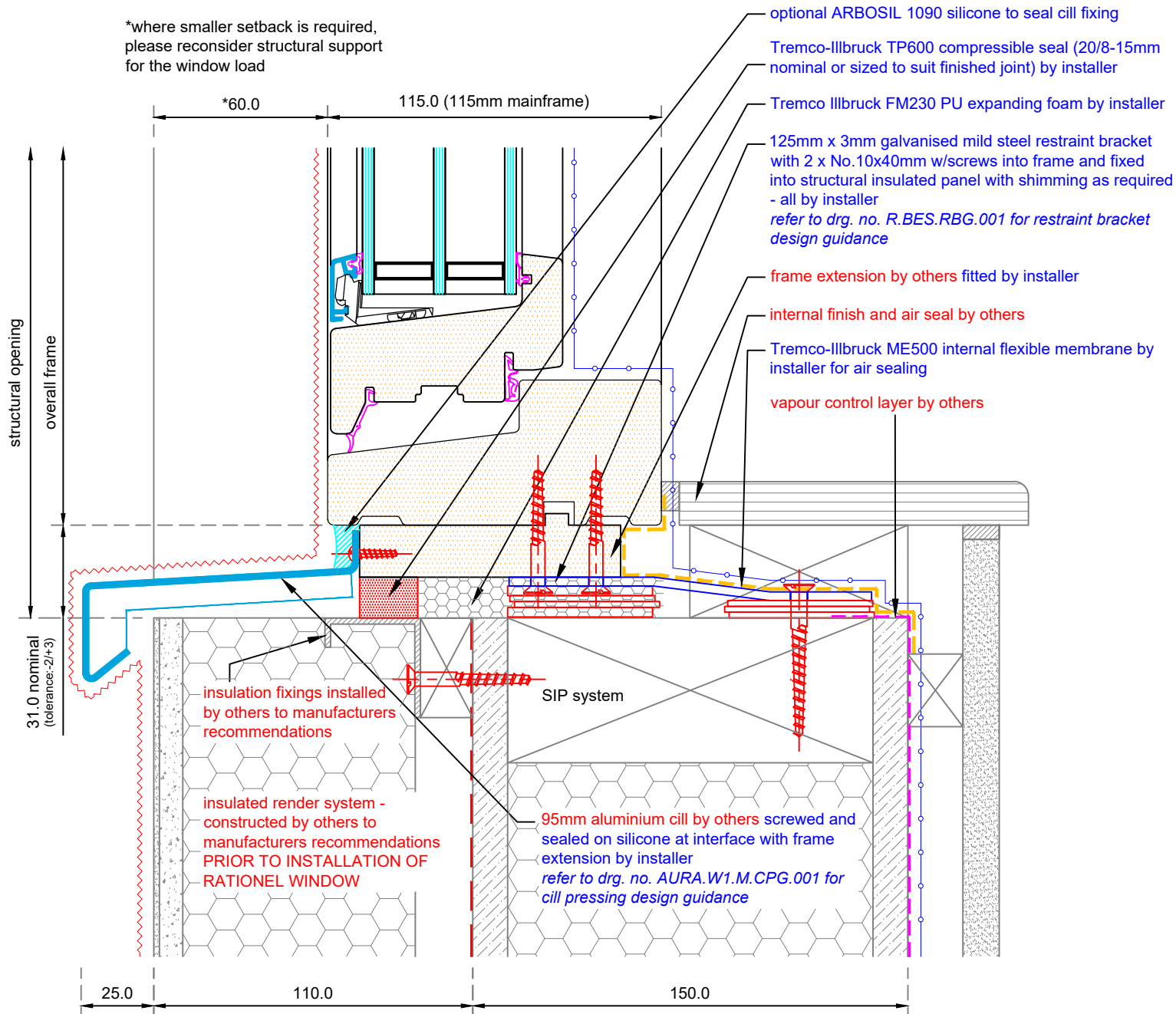
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insulated render/structural insulated panel

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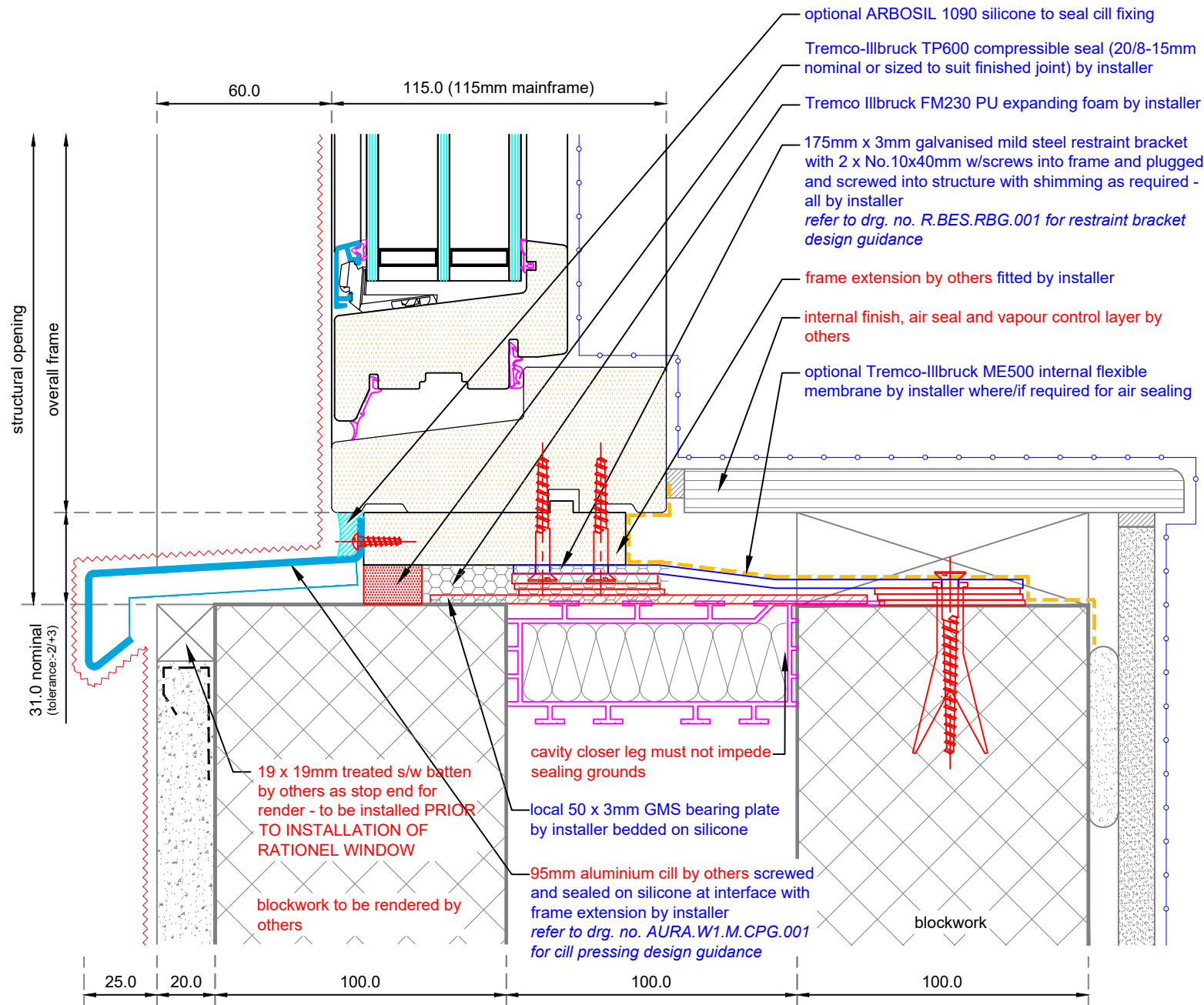
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primary air barrier line



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Title:

Rational AURA  
TYPICAL CILL DETAIL  
rendered block/block masonry

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.03.A.C.001

Drawn: Studio62

Status: approved

Revision:

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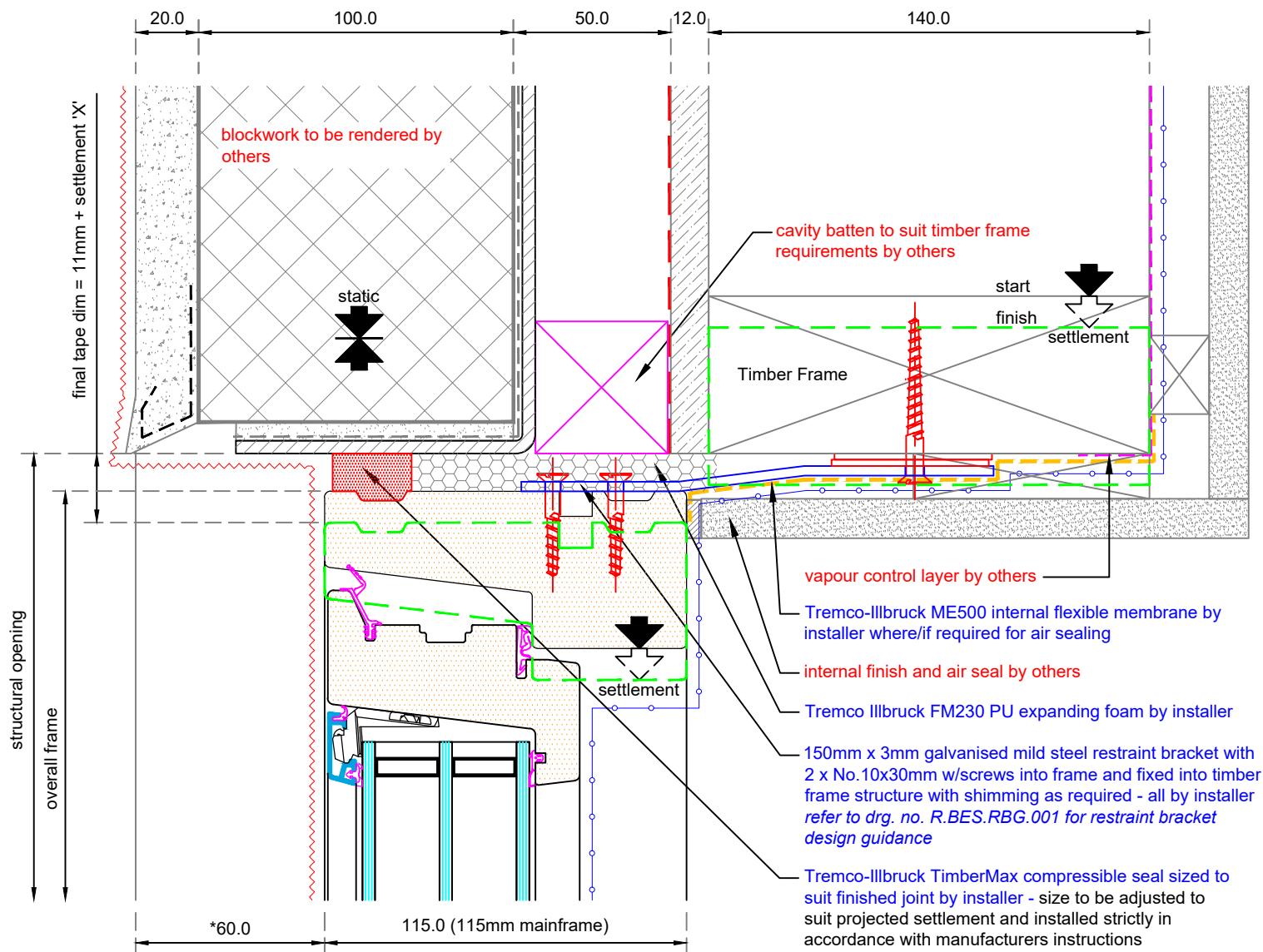












| settlement 'X' per storey (up to 5 stories) |                                      |                                      |
|---------------------------------------------|--------------------------------------|--------------------------------------|
| location                                    | using solid timber joist floors (mm) | using engineered i-joist floors (mm) |
| ground storey                               | 3                                    | 3                                    |
| first storey                                | 12                                   | 9                                    |
| second storey                               | 21                                   | 15                                   |
| third storey                                | 30                                   | 21                                   |
| fourth storey                               | 39                                   | 27                                   |
| fifth storey                                | 48                                   | 33                                   |

Source: LABC warranty technical manual v.7

#### NOTES:

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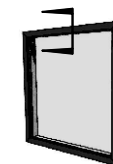
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primary air barrier line



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Title:

Rational AURA  
**TYPICAL HEAD DETAIL**  
rendered blockwork/timber frame

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.03.B.H.001

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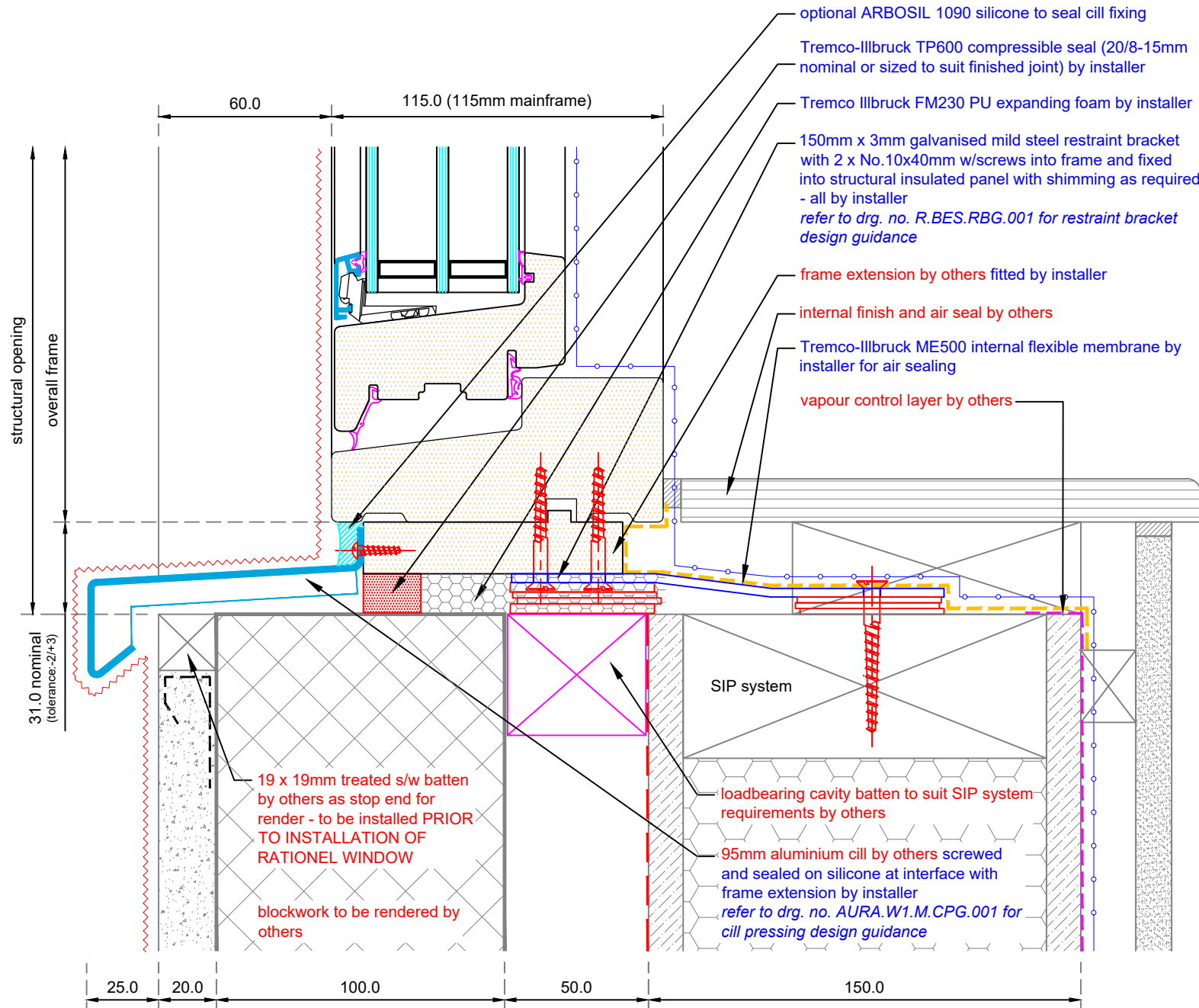












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1. External weather seal to be either Tremco-Ilbruck joint sealing tape sized to suit finished joint size or ARBOSIL 1090 silicone seal and polyethylene backing rod.
2. Fixings and brackets to be installed strictly in accordance with Rational installation guidance.
3. Fixing grounds must be able to withstand all loads transmitted from and through the Rational system.

primary weather line

primary air barrier line



| Rev | Date | By | Description |
|-----|------|----|-------------|
|-----|------|----|-------------|

Title:

Rational AURA  
**TYPICAL CILL DETAIL**  
rendered blockwork/structural insulated panel

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.03.D.C.001

Drawn: Studio62

Status: approved

Revision:

**rational**<sup>®</sup>

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web: www.rational.co.uk

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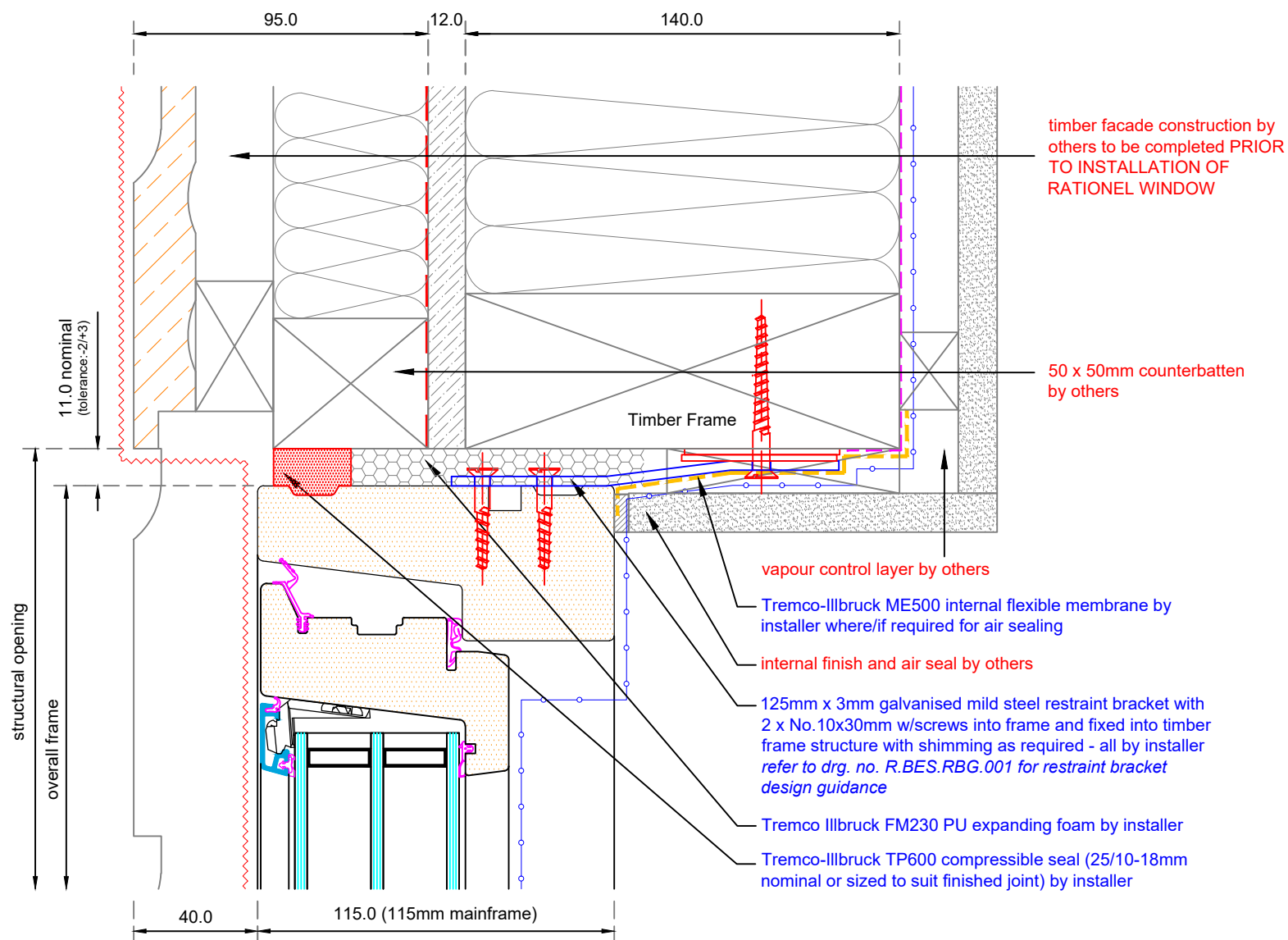












**PLEASE NOTE:**

this detail assumes there is no differential movement between the external building finish and the structural timber frame  
i.e. - external finish is fixed directly to timber frame and any required movement joints are outside of the window zone.

**IMPORTANT NOTE:** When installing Rationel windows and accessories, please ensure compliance with national building regulations and British/European standards where necessary. This drawing is for guidance only and the customer must be satisfied that the principles outlined in this drawing are effectively transposed to suit specific project requirements and site conditions.

All dimensions are in millimetres where shown. Do not scale.

**NOTES:**

1. External weather seal to be either Tremco-Ilbruck joint sealing tape sized to suit finished joint size or ARBOSIL 1090 silicone seal and polyethylene backing rod.
2. Fixings and brackets to be installed strictly in accordance with Rationel installation guidance.
3. Fixing grounds must be able to withstand all loads transmitted from and through the Rationel system.



| Rev | Date | By | Description |
|-----|------|----|-------------|

Title:

Rationel AURA  
**TYPICAL HEAD DETAIL**  
timber/timber frame

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.04.B.H.001

Drawn: Studio62

Status: approved

Revision:

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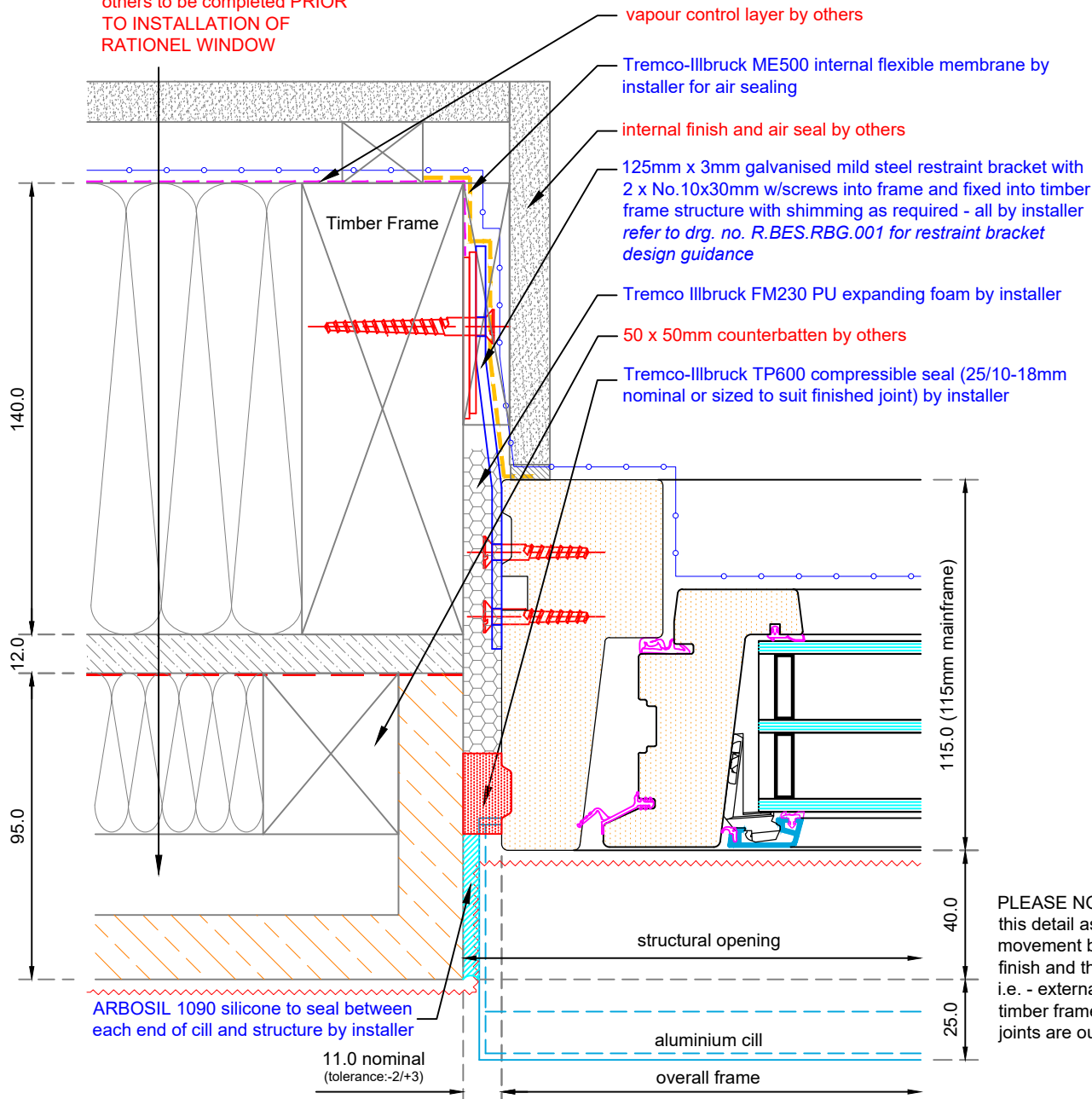
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timber facade construction by others to be completed PRIOR TO INSTALLATION OF RATIONEL WINDOW



**PLEASE NOTE:**  
this detail assumes there is no differential movement between the external building finish and the structural timber frame i.e. - external finish is fixed directly to timber frame and any required movement joints are outside of the window zone.

**IMPORTANT NOTE:** When installing Rational windows and accessories, please ensure compliance with national building regulations and British/European standards where necessary. This drawing is for guidance only and the customer must be satisfied that the principles outlined in this drawing are effectively transposed to suit specific project requirements and site conditions.

All dimensions are in millimetres where shown. Do not scale.

#### NOTES:

1. External weather seal to be either Tremco-Ilbruck joint sealing tape sized to suit finished joint size or ARBOSIL 1090 silicone seal and polyethelene backing rod.
2. Fixings and brackets to be installed strictly in accordance with Rational installation guidance.
3. Fixing grounds must be able to withstand all loads transmitted from and through the Rational system.

primary weather line  
primary air barrier line



|     |      |    |             |
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|     |      |    |             |

Title:

Rational AURA  
**TYPICAL JAMB DETAIL**  
timber/timber frame

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.04.B.J.001

Drawn: Studio62

Status: approved

Revision:

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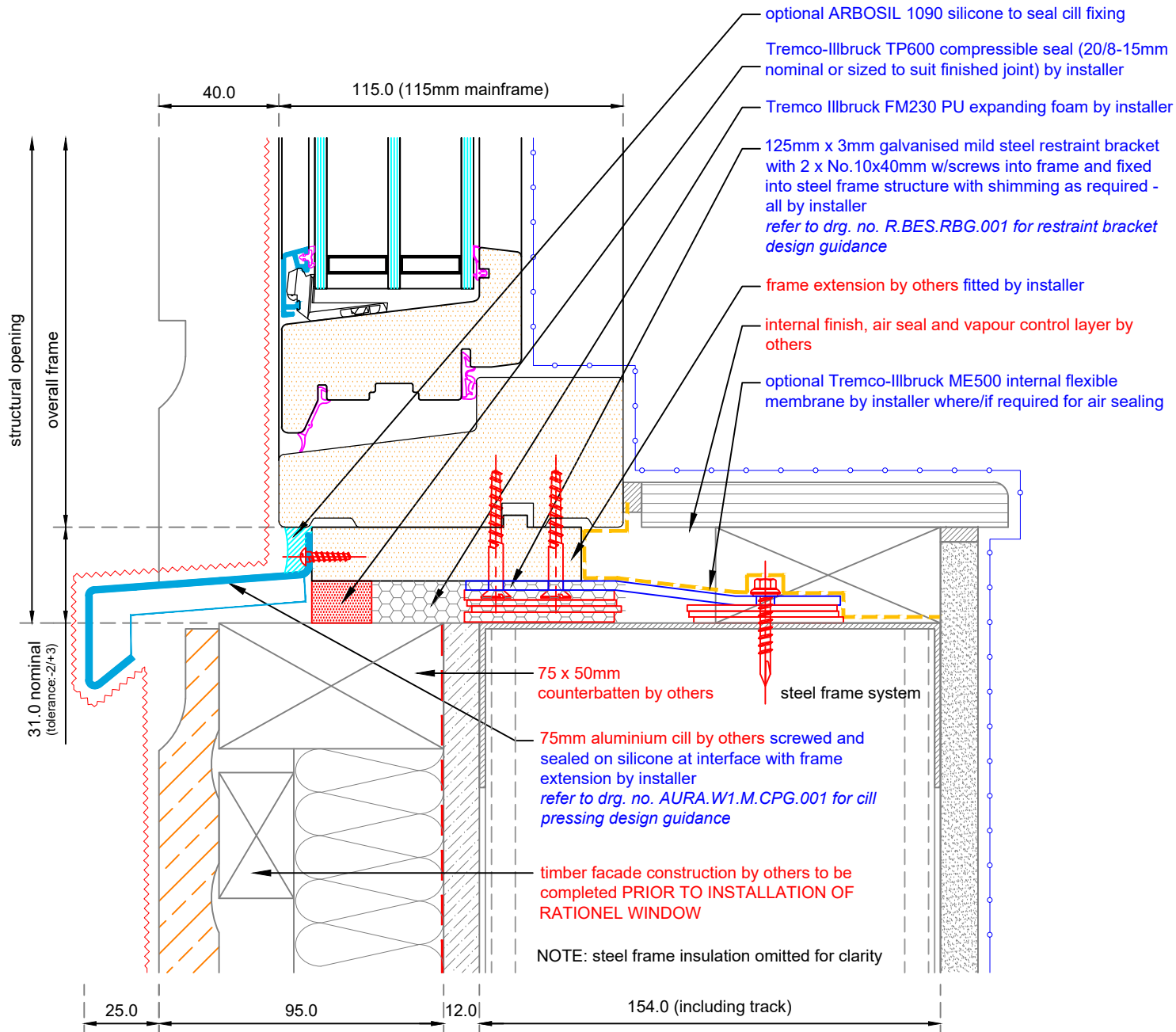
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All dimensions are in millimetres where shown. Do not scale.

#### NOTES:

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2. Fixings and brackets to be installed strictly in accordance with Rationel installation guidance.
3. Fixing grounds must be able to withstand all loads transmitted from and through the Rationel system.

~~~~~ primary weather line  
 ---o--- primary air barrier line



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| Rev | Date | By | Description |
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Title:

Rationel AURA
TYPICAL CILL DETAIL
 timber/steel frame system

Scale: 1:2 approx @ A4

Drawing no:

Date: January 2017

AURA.W1.04.C.C.001

Drawn: Studio62

Status: approved

Revision:

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OF RATIONEL WINDOW

154.0 (including track)

12.0

95.0

115.0 (115mm mainframe)

40.0

25.0

11.0 nominal (tolerance:-2/+3)

steel frame system

optional Tremco-IIIbruck ME500 internal flexible membrane by installer where/if required for air sealing

internal finish, air seal and vapour control layer by others

125mm x 3mm galvanised mild steel restraint bracket with 2 x No.10x30mm w/screws into frame and fixed into steel frame structure with shimming as required - all by installer refer to drg. no. R.BES.RBG.001 for restraint bracket design guidance

Tremco IIIbruck FM230 PU expanding foam by installer

50 x 50mm counterbatten by others

Tremco-IIIbruck TP600 compressible seal (25/10-18mm nominal or sized to suit finished joint) by installer

ARBOSIL 1090 silicone to seal between each end of cill and structure by installer

structural opening

aluminium cill

overall frame

Title:

Rationel AURA
TYPICAL JAMB DETAIL
timber/steel frame system

| | |
|------------------------|---------------------------------------|
| Scale: 1:2 approx @ A4 | Drawing no:

AURA.W1.04.C.J.001 |
| Date: January 2017 | |
| Drawn: Studio62 | |
| Status: approved | Revision: |

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150.0

95.0

SIP system

125mm x 3mm galvanised mild steel restraint bracket with 2 x No.10x30mm w/screws into frame and fixed into structural insulated panel with shimming as required - all by installer refer to drg. no. R.BES.RBG.001 for restraint bracket design guidance

Tremco Illbruck FM230 PU expanding foam by installer

50 x 50mm counterbatten by others

Tremco-Illbruck TP600 compressible seal (25/10-18mm nominal or sized to suit finished joint) by installer

115.0 (115mm mainframe)

40.0

25.0

structural opening

aluminium cill

overall frame

11.0 nominal (tolerance:-2/+3)

ARBOSIL 1090 silicone to seal between each end of cill and structure by installer

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| | | | |
| Rev | Date | By | Description |

Rational AURA
TYPICAL JAMB DETAIL
timber/structural insulated panel

| | |
|------------------------|---------------------------------------|
| Scale: 1:2 approx @ A4 | Drawing no:

AURA.W1.04.D.J.001 |
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