M-SIPs Installation Manual

June 2019

Installation and designing information on M-SIPs

M-SIPs™

GREEN AND FIREPROOF CONSTRUCTION

M-SIPs has deep roots in the innovative design culture of Scandinavia, is now introducing International and American Certified SIPs materials to the American construction market. We're bringing innovative advancements and superior products – products that eliminate the limitations of current materials such as expansion and contraction, rotting, warping and fire hazards. Multi-Panels' full product range includes SIPs, (Patent Pending process) Fiber Cement Siding, structural sheathing (non combustible) and XPS shower and tile backer. Our advanced certified concepts and products mix save both time and money by being a true single-material replacement for the two, three and sometimes five layers used in current material practices. These products are the result of years of research, development and certification some in a Patent Pending Processes. They have produced an exceptional track record of quality and efficiency – and provide remarkable labor-saving solutions. With superior-performance products, we are often asked why Multi-Panels is not more expensive than our competitors. The answer is simple: We maintain an innovative mindset not only with our product mix but also with the way we bring those products to market. In short, we have a streamlined value chain with lower overhead… and we pass the resulting savings directly to our clients. Contact us with any questions you may have …

Our product range has been though intensive long term testing and are certified and tested towards both European, North America and Canadian building regulations:

ASTM INTERNATIONAL

ICC ES

CE

CAN/ULC

www.m-sips.com

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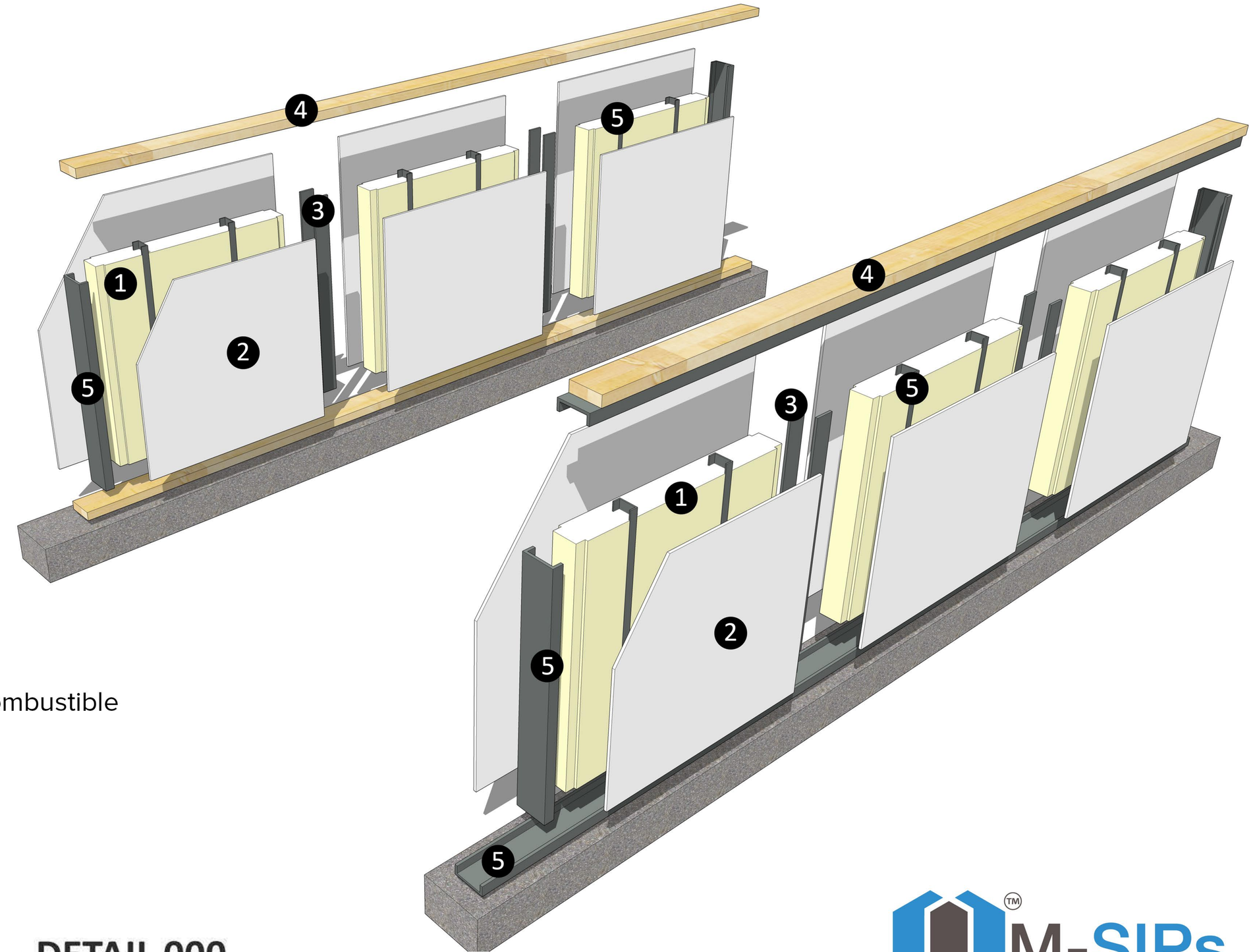
Guidelines for Installation

- Secure project apply to local building code. Engineered details take prescedence over M-SIPs details.
- Preconstruction meeting with your installation crew (concrete, plumbing, electrical, siding, roofing, etc.).
- Inventory materials when you receive them according project and order confirmation.
- Check all SIPs sizes and compare to project drawings before installation.
- Details regarding mastic and SIPs tape need to be followed and fill all voids with expanding foam.
- Make sure your foundation or floor is level and square.
- Make sure to pre-drill the top and bottom plates for the vertical electrical chases in the wall panels.
- Fabricate and pre-install dimensional or spline material as specified.
- Follow engineering for hold downs if applicable.
- Do not put plumbing inside SIPs.
- Do not cut the M4 sheathing facing for extra electrical chases or plumbing.
- Do not lift up the M-SIPs by the edge of the top skin use, use vacuum lift system as for glass.
- Remove any debris from U profile or sill plate before you place the M-SIP wall panel on it.
- Make sure that both side of the M4 facing skin are bearing on the floor.
- Follow proper nailing and screwing requirements and thermal expansion according to details and job specific engineering.



1 Rigid Foam PIR

2 M4 Structural - Non Combustible

3 Spline

4 Wood

5 C studs

DETAIL A CONCEPT - DETAIL 000

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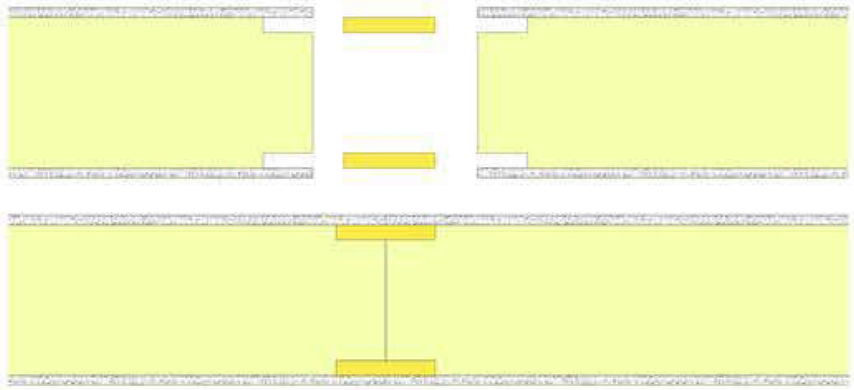
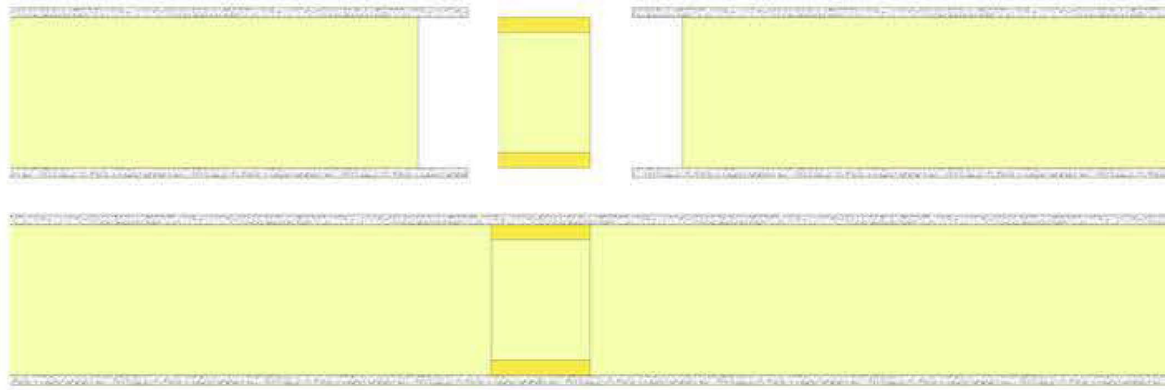
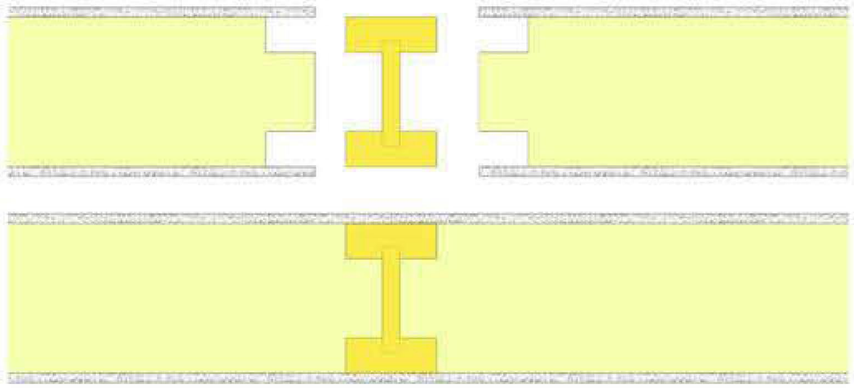


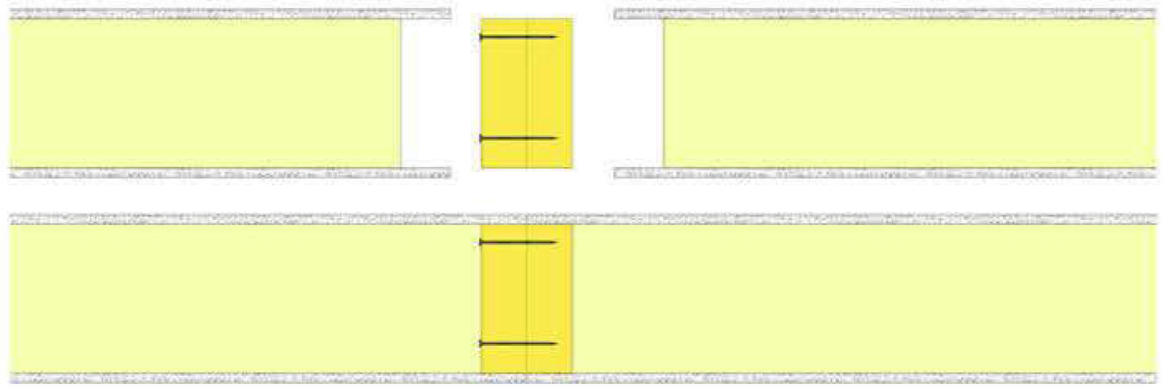
Surface spline (Type S)



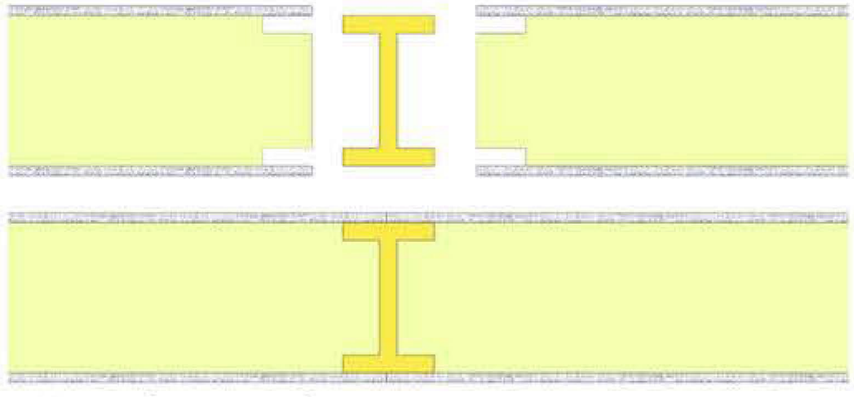
Block spline (Type S)



Engineerd lumber spline (Type I)



Dimensional lumber spline (Type L)



FRP spline (Type F)

DETAIL 000

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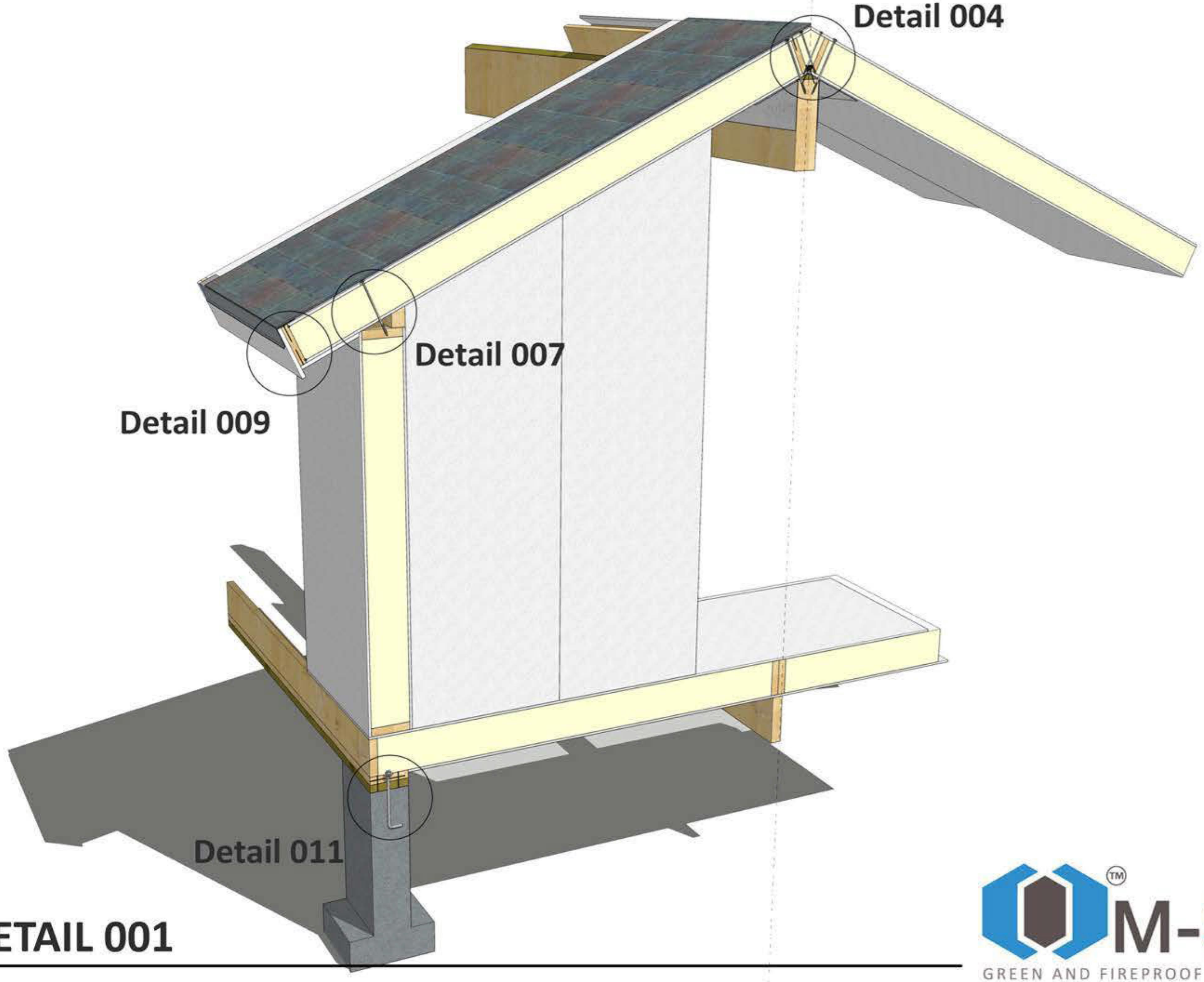

DETAIL 001

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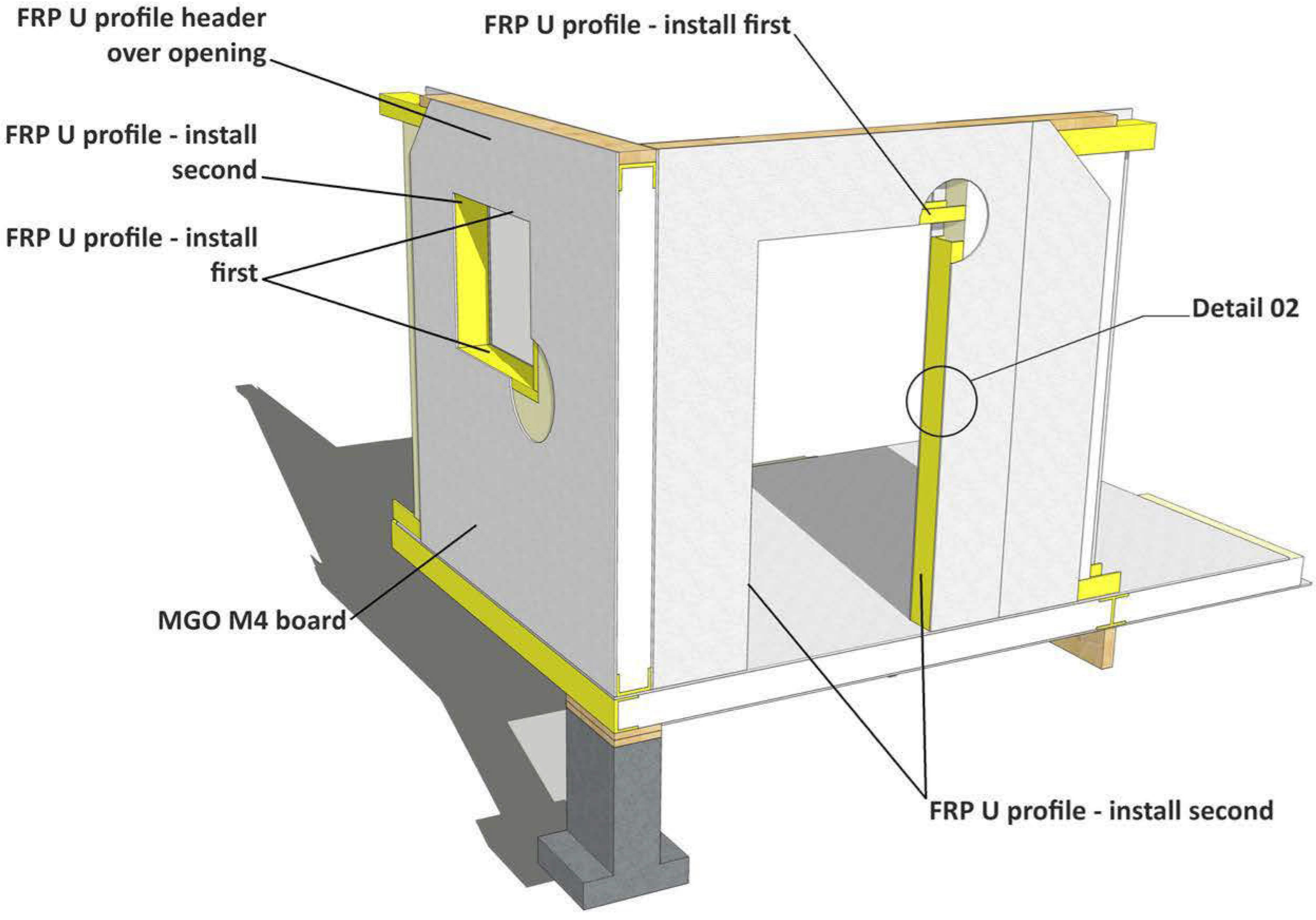

TYPICAL PANEL WALL DETAIL - 002

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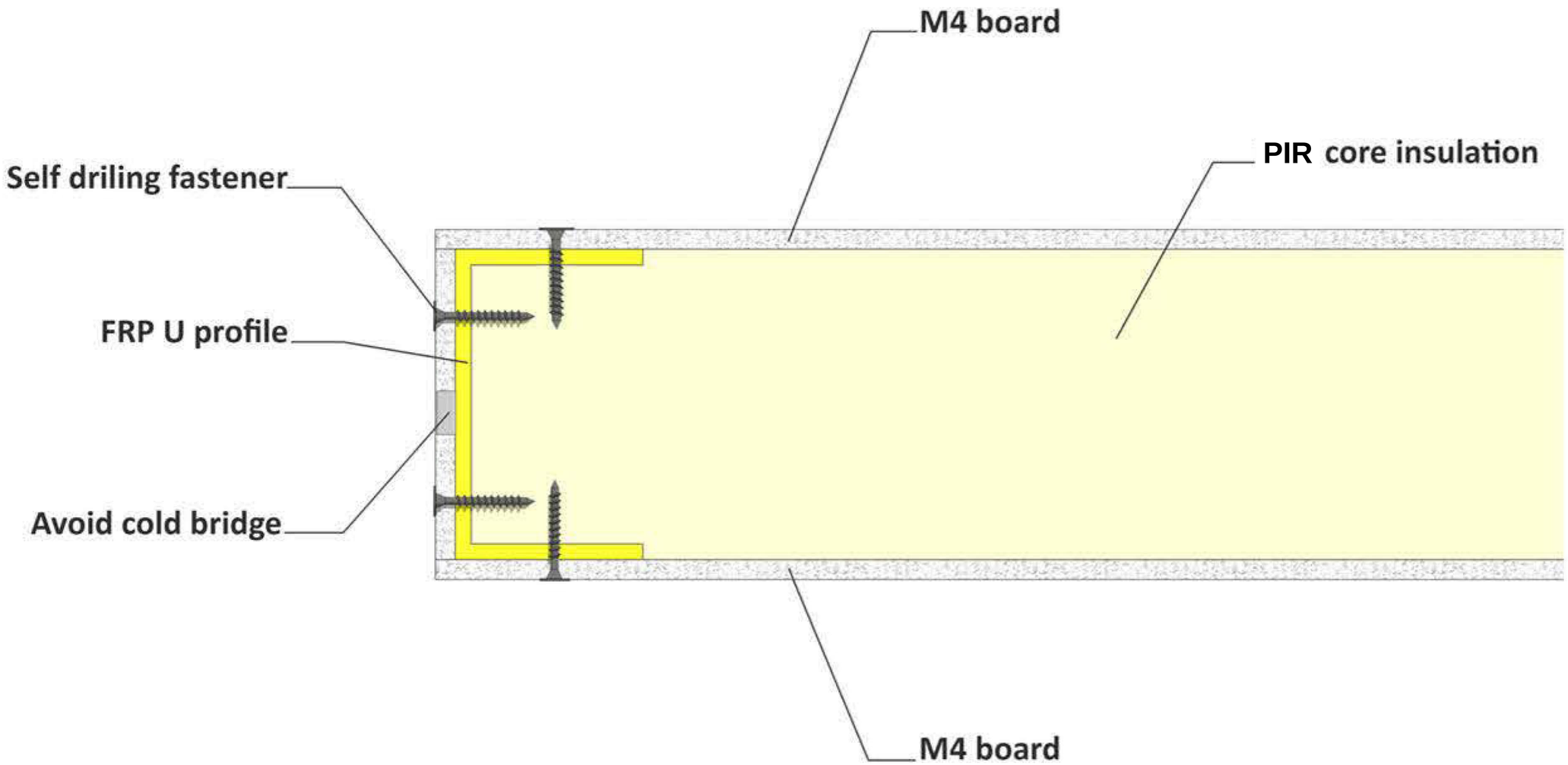

WINDOW/DOOR VERTICAL/HORIZONTAL FRP PROFILE DETAIL 02

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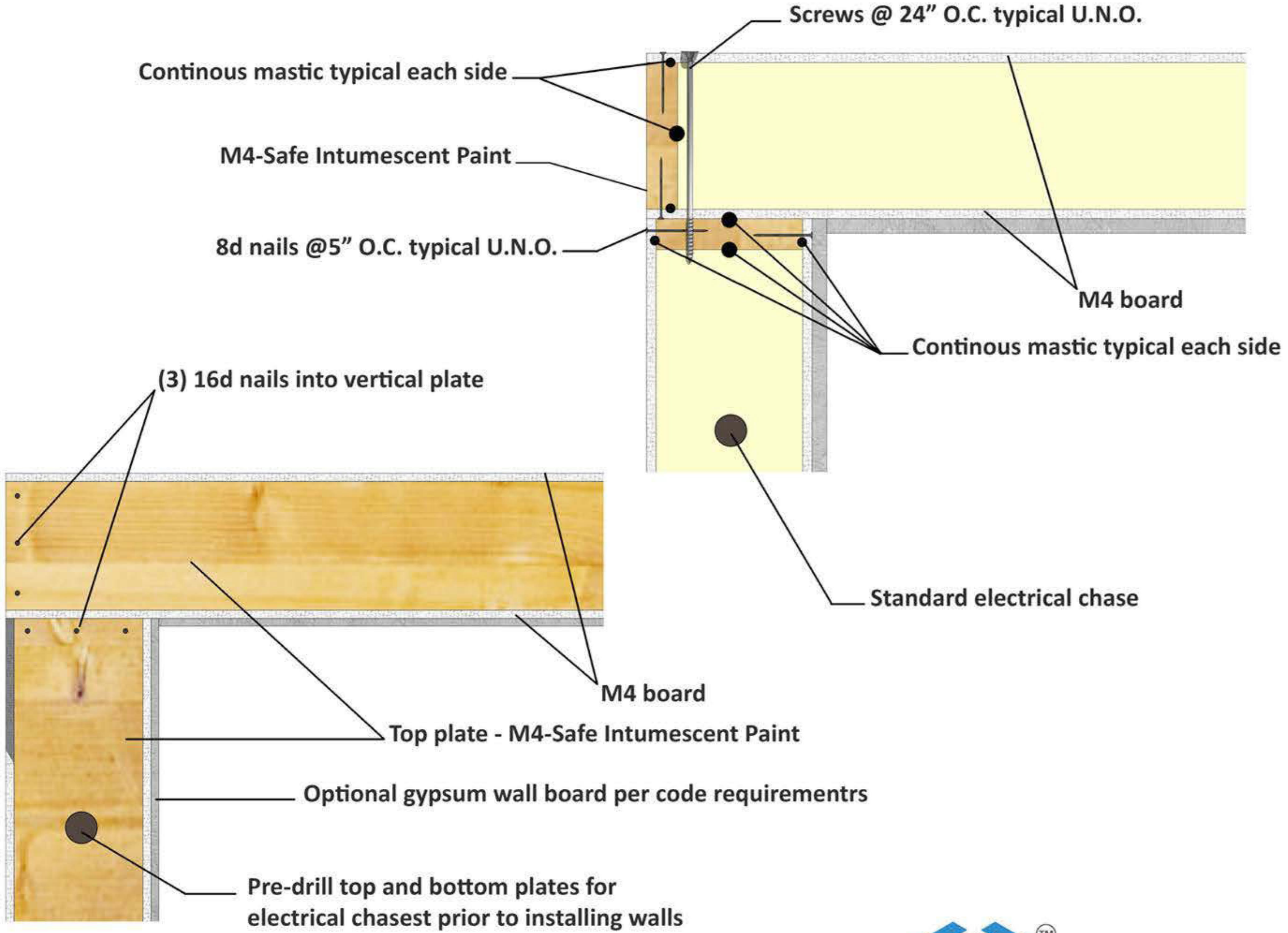

WALL PANEL CORNER SECTION DETAIL - 003

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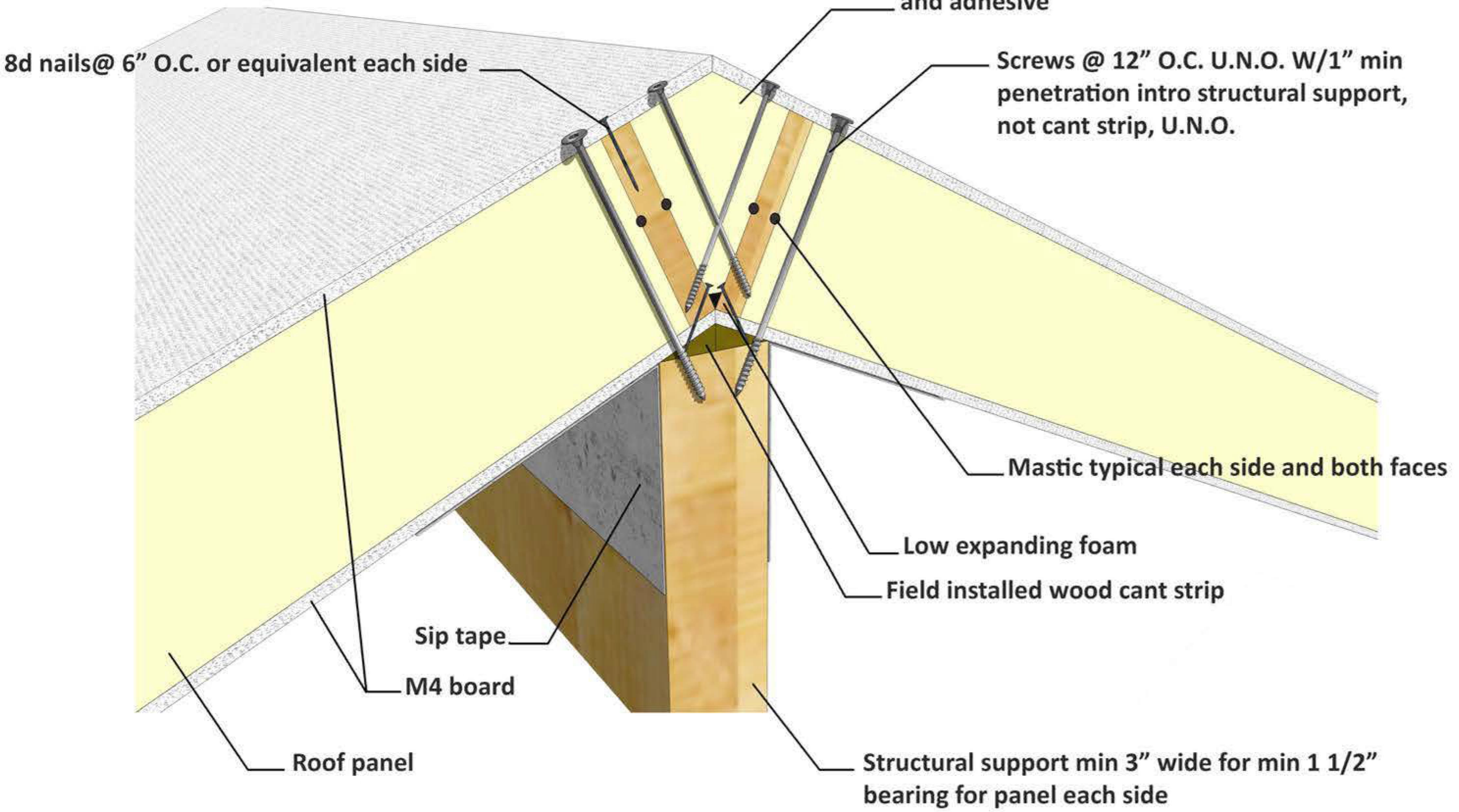

RIDGE CAP DETAIL - 004

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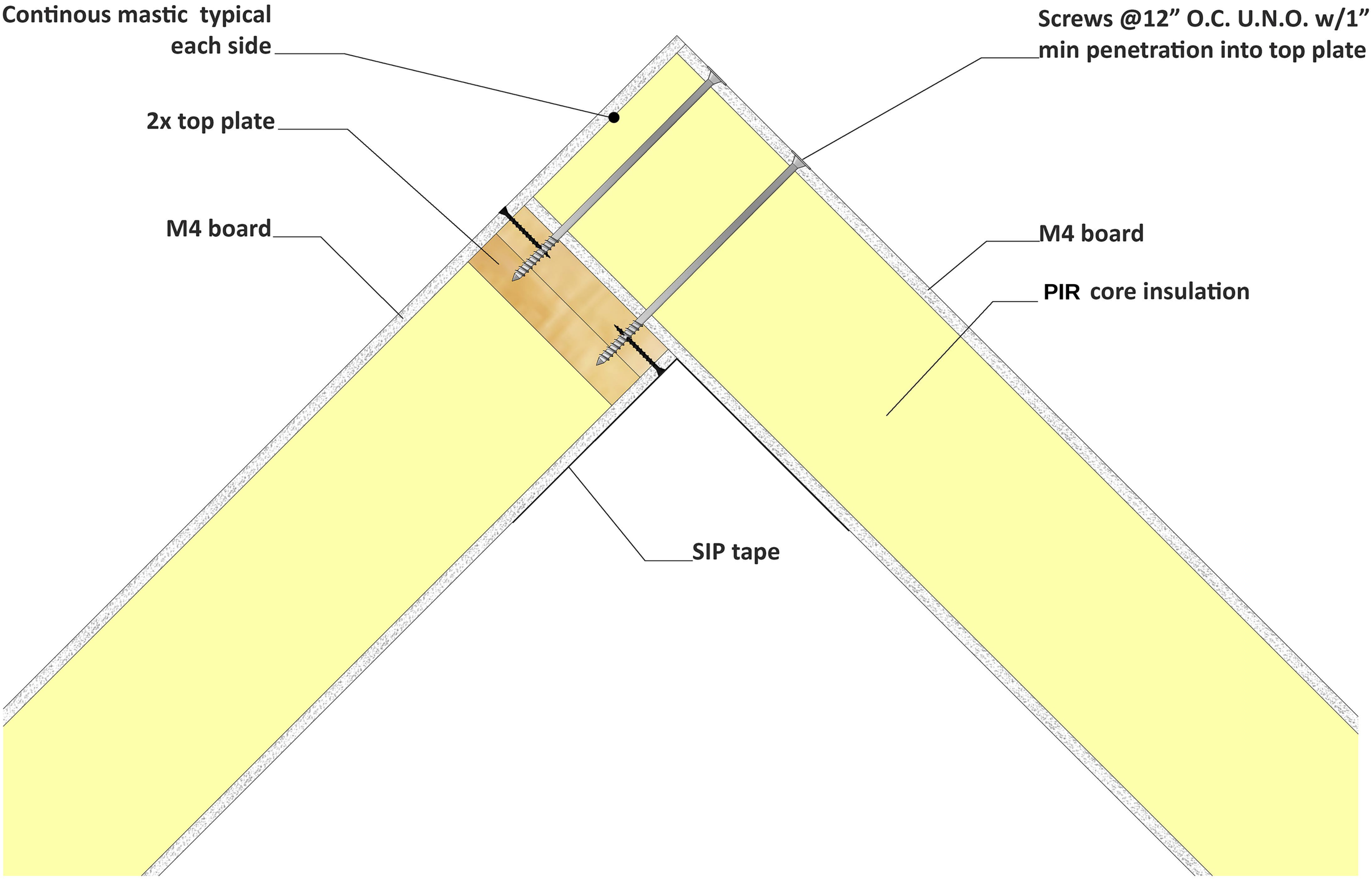

ROOF PITCH RIDGE DETAIL - 004 A

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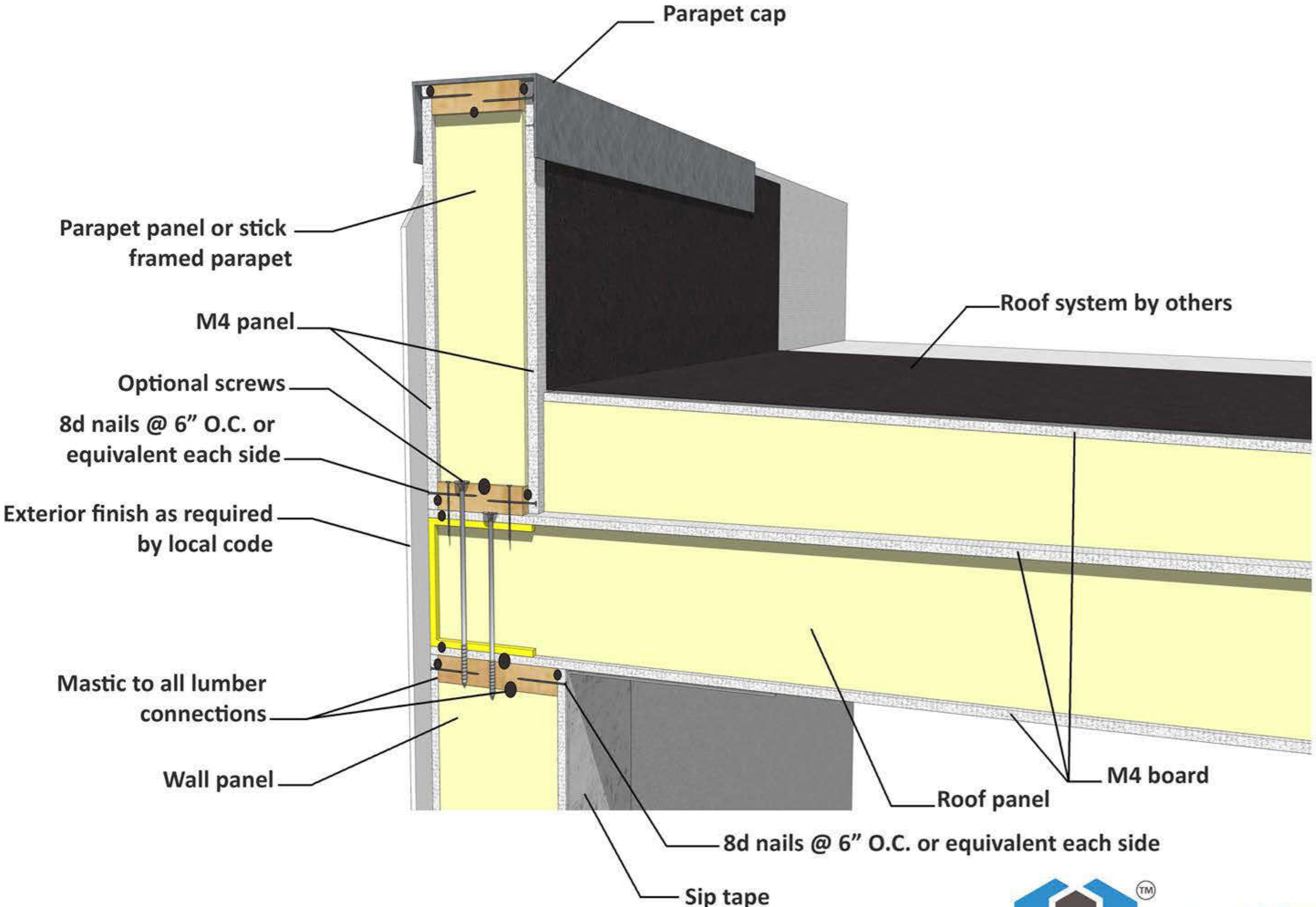

PARAPET DETAIL - 005

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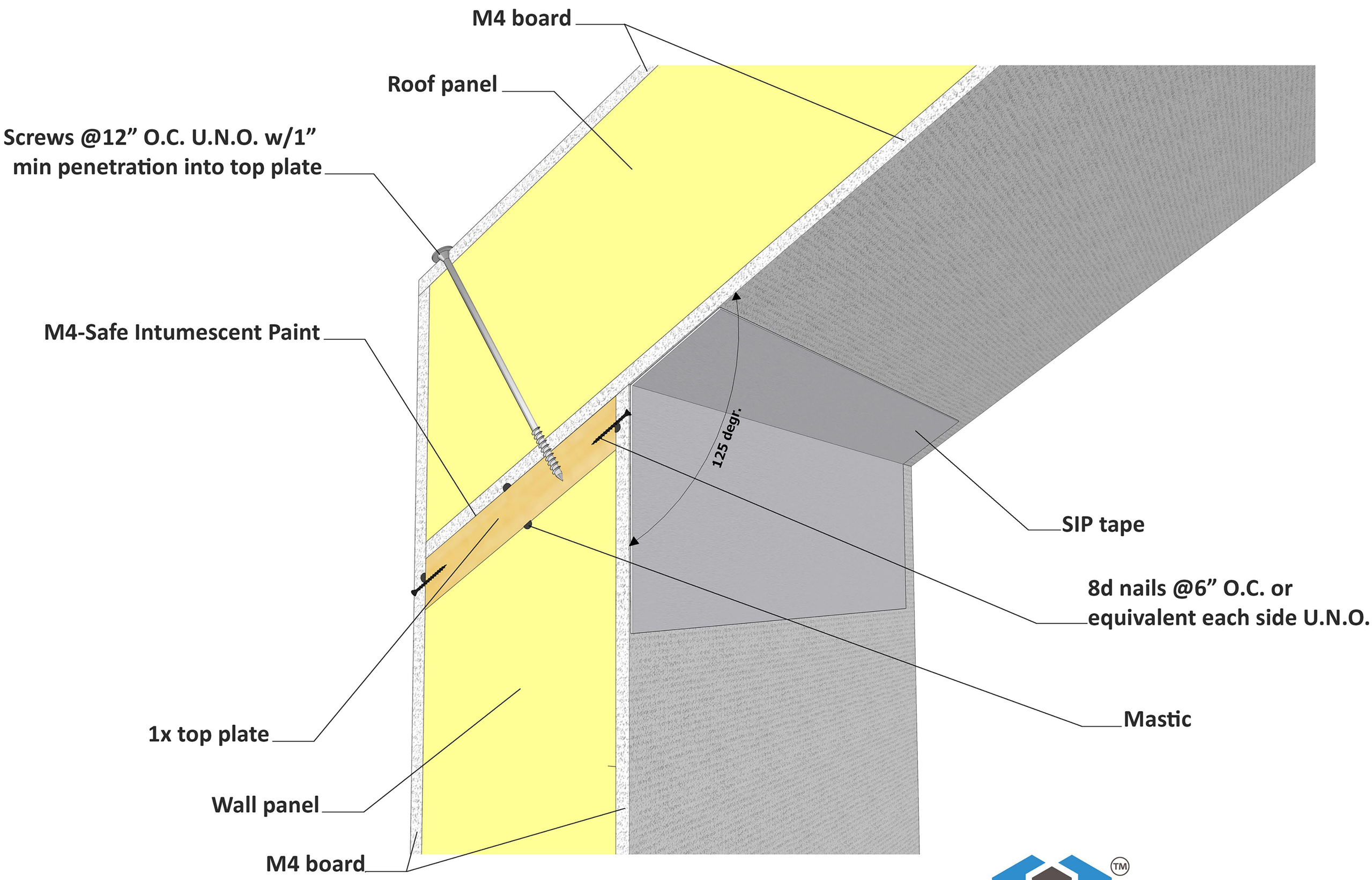

DETAIL - 006

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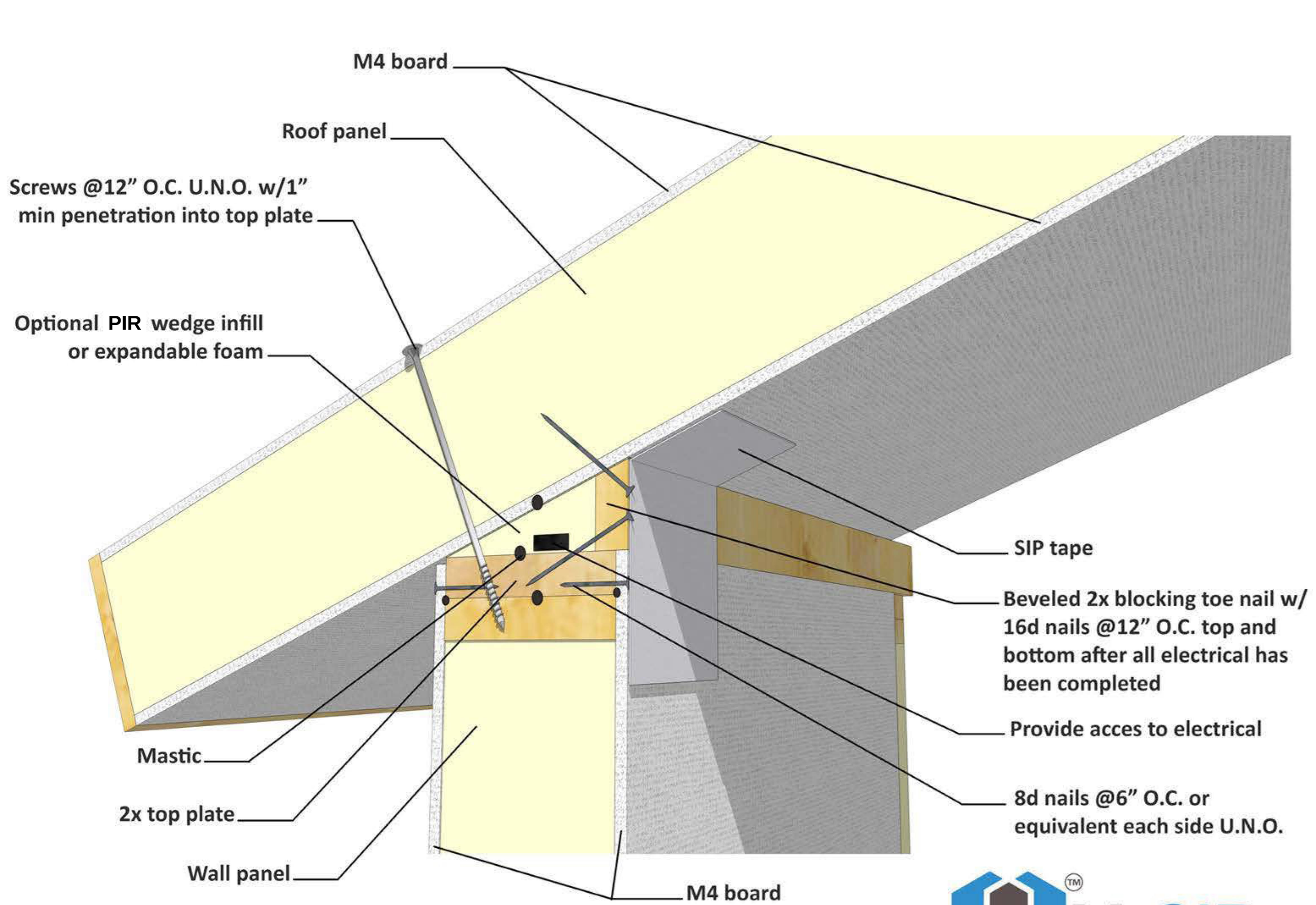

BEVELED BLOCK PANEL WALL/ROOF DETAIL - 007

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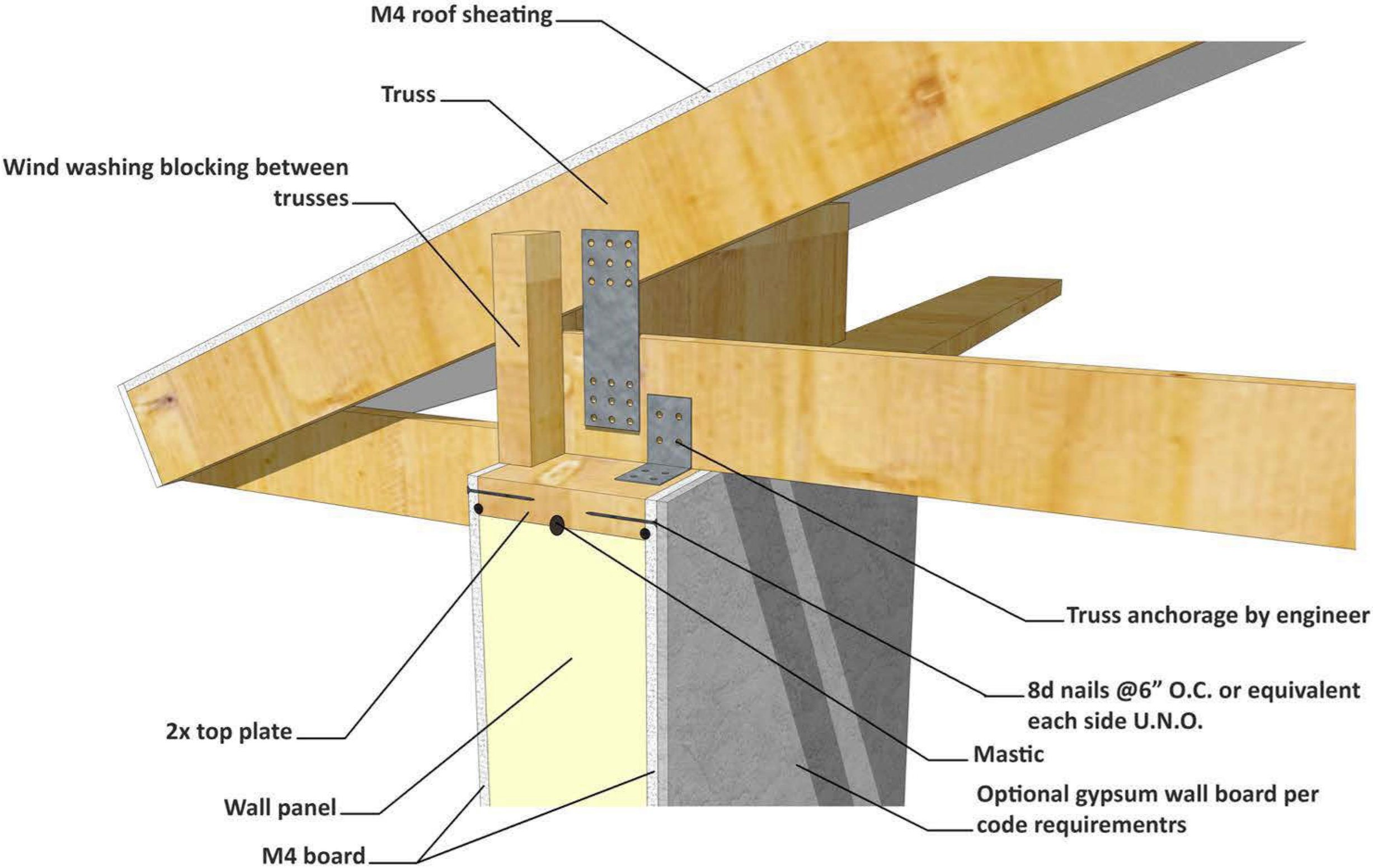

TRUSS BEARING DETAIL - 008

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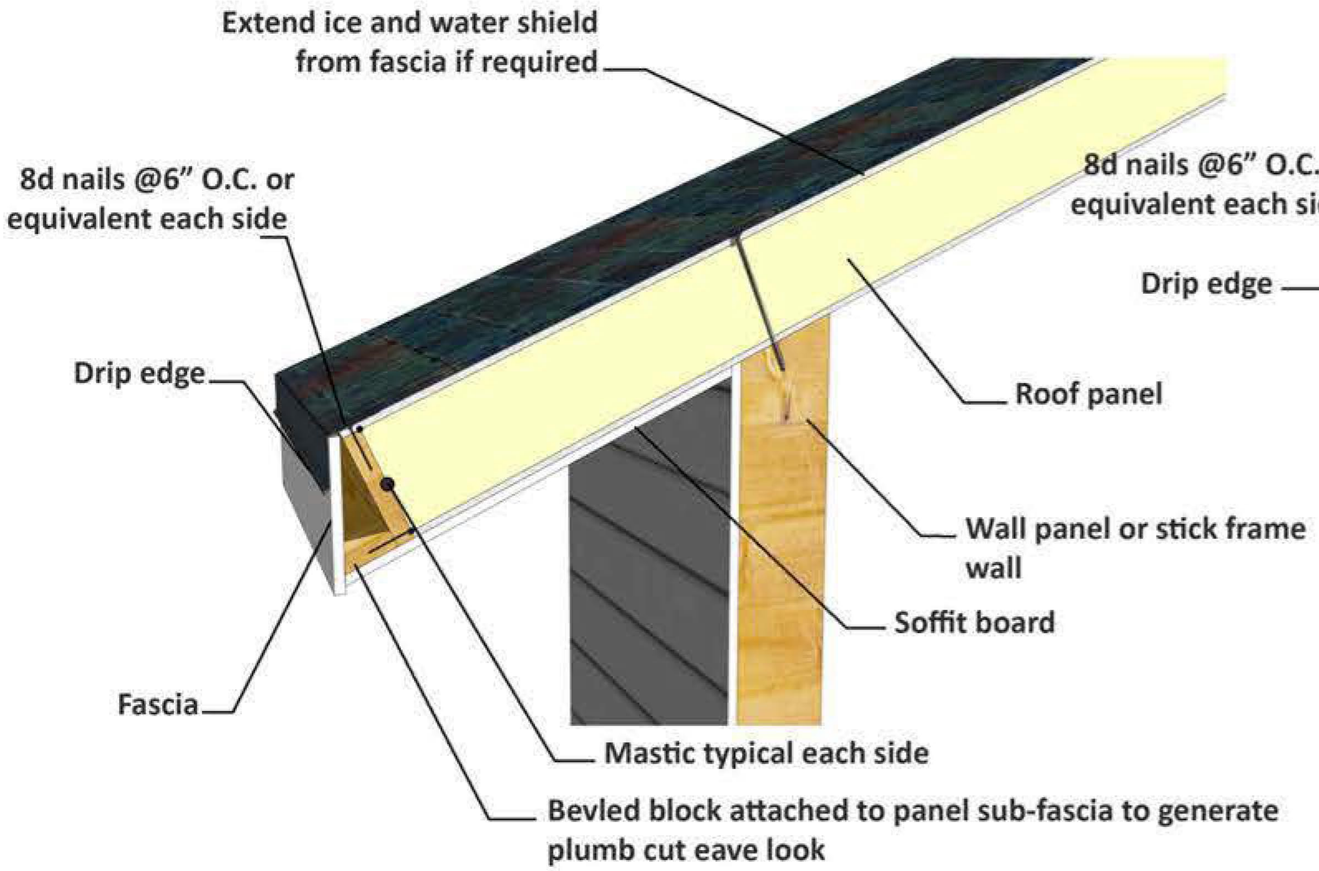
I.



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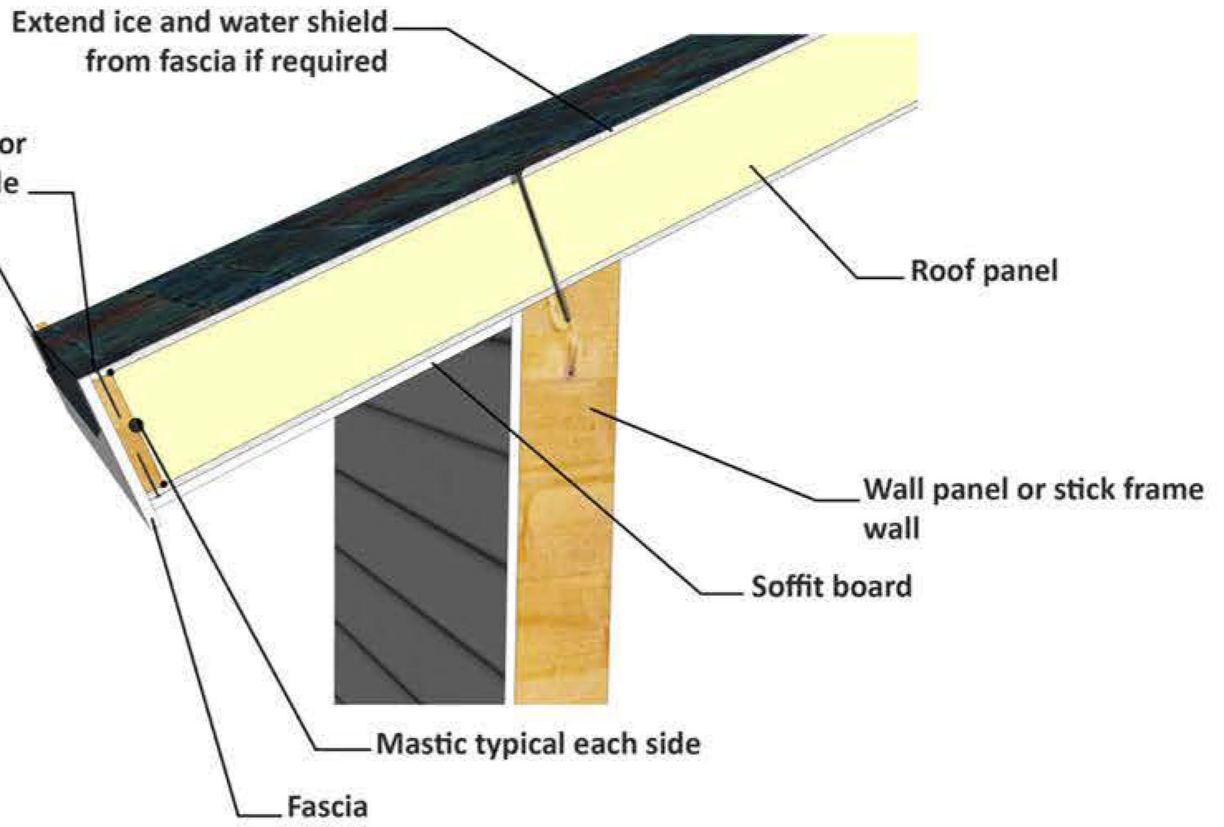

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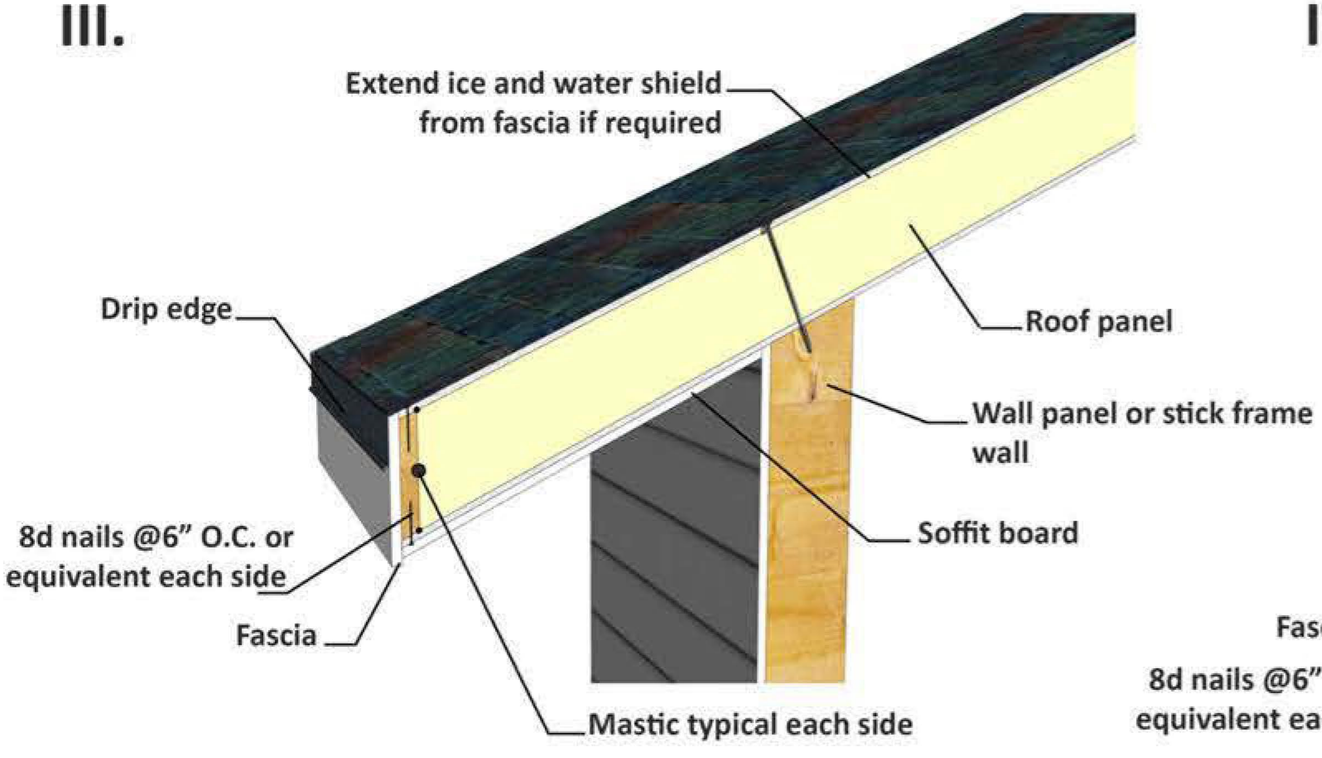

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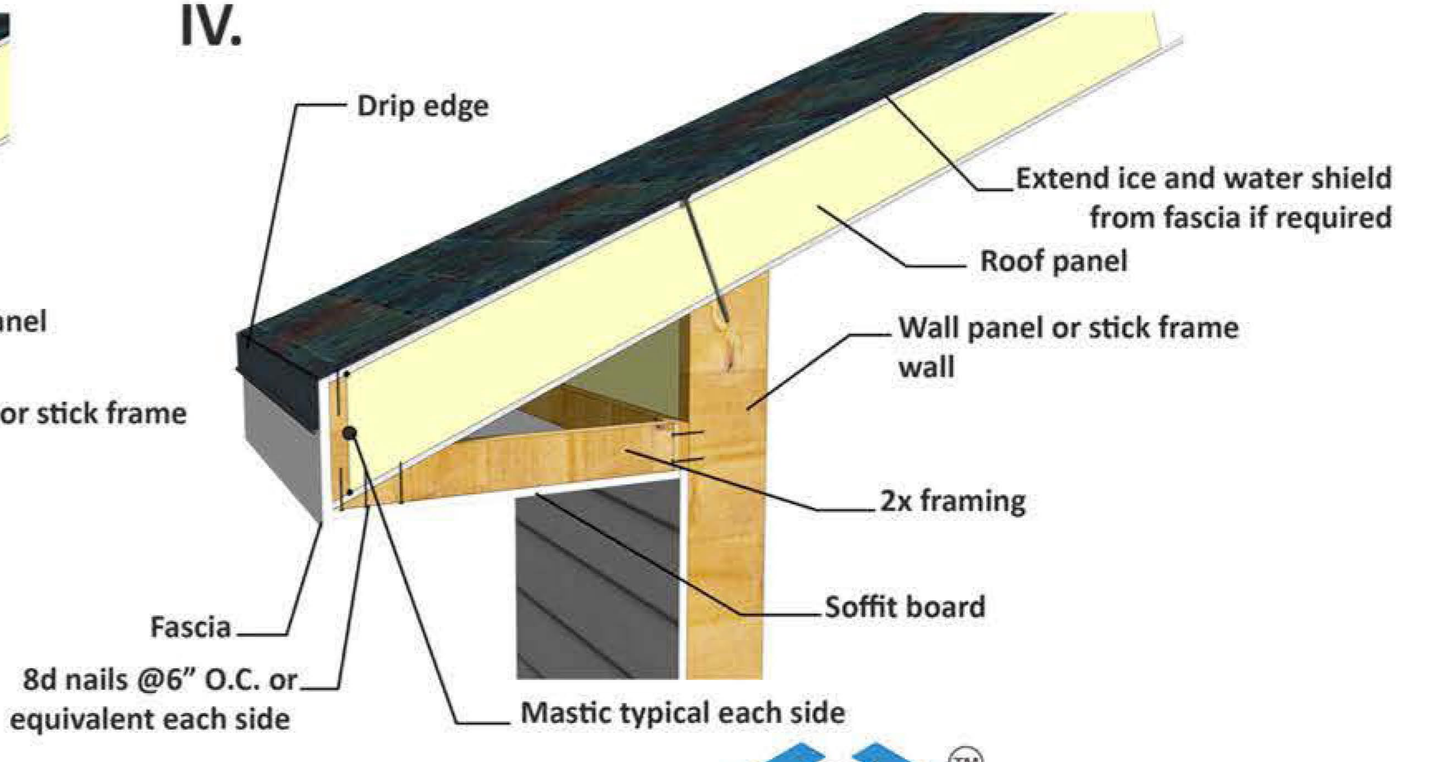

EAVES DETAILS - 009

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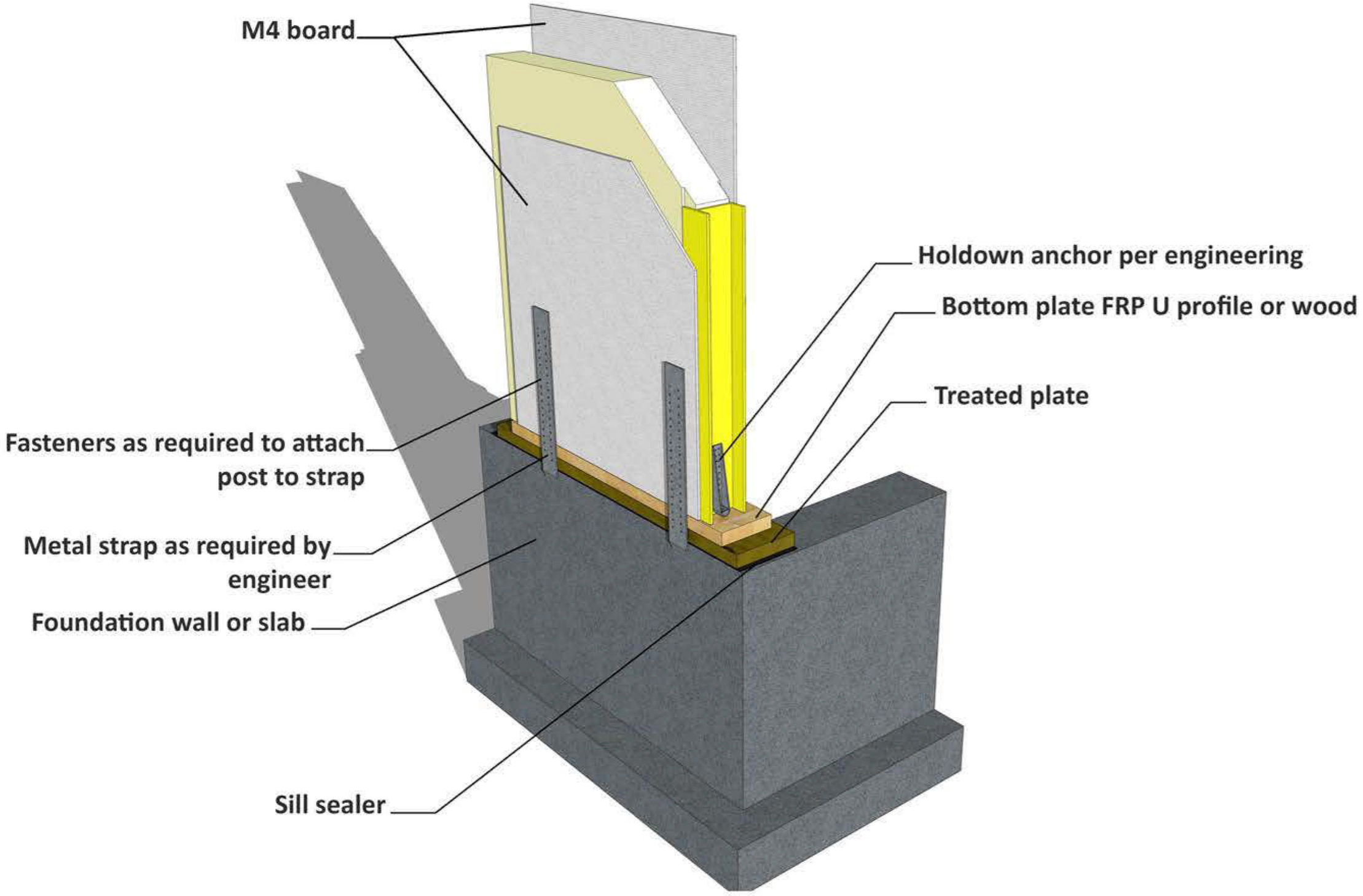

STRAP HOLDDOWN CONNECTION DETAIL - 010

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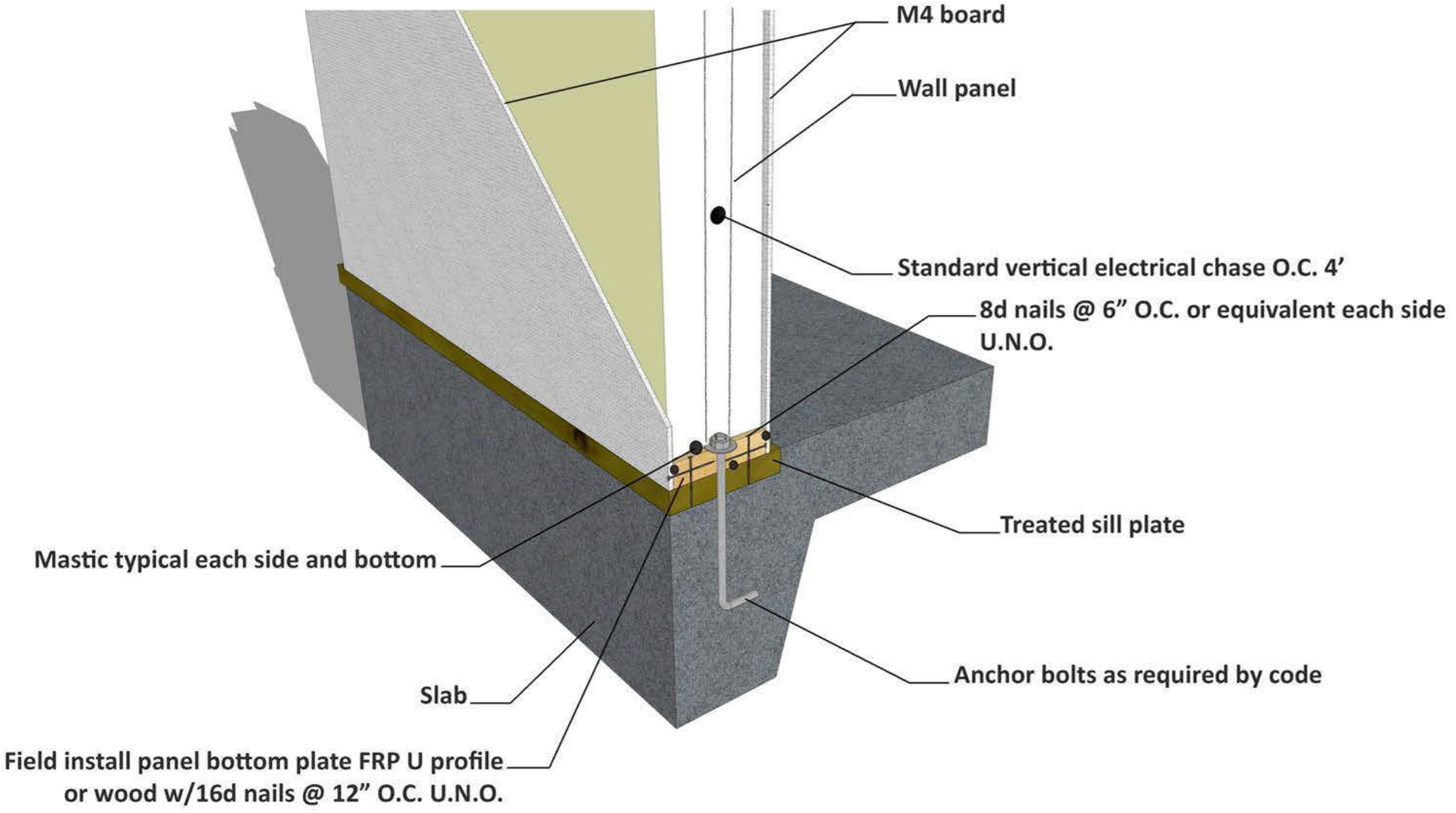

RECESSED SILL PLATE DETAIL - 011

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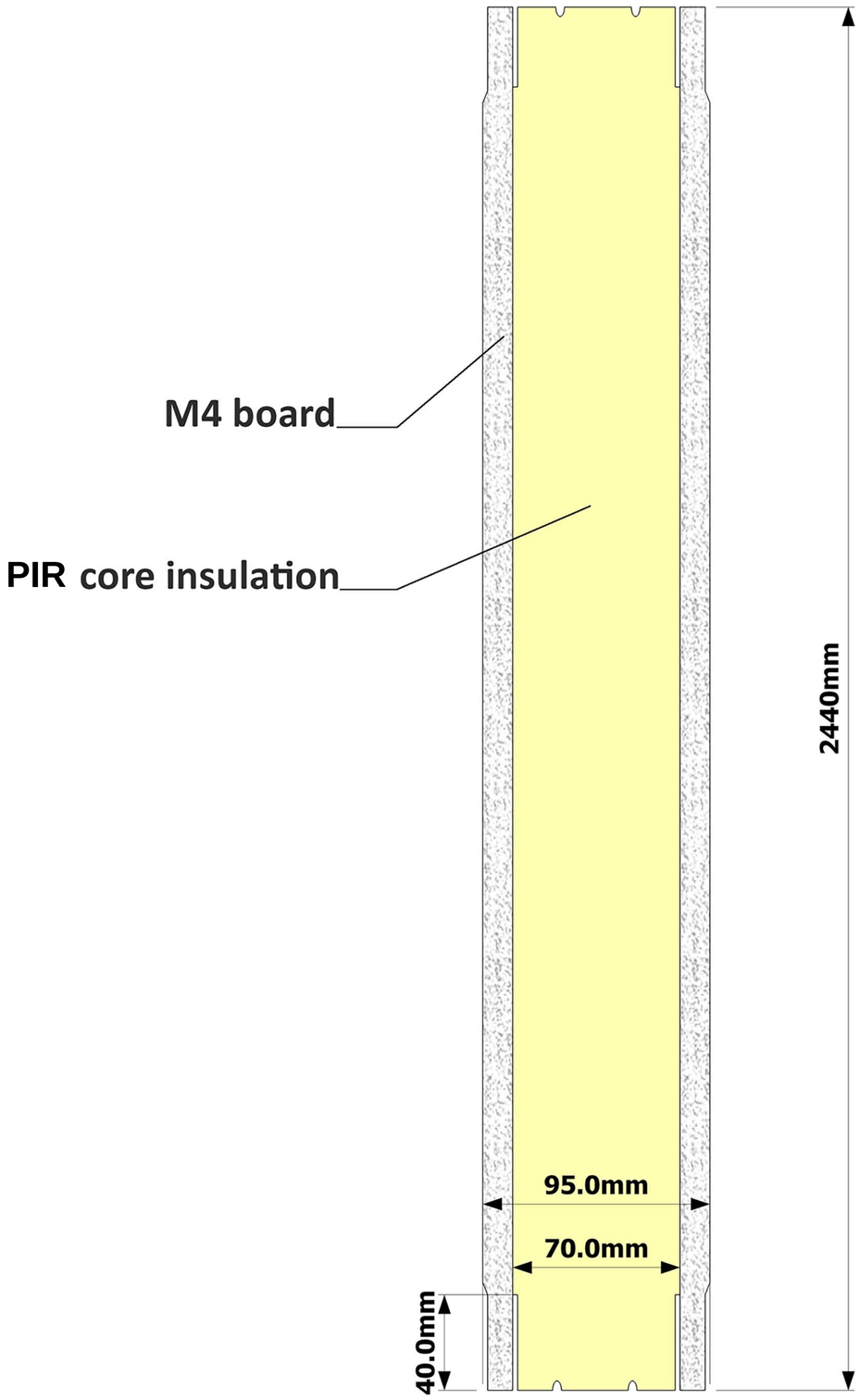

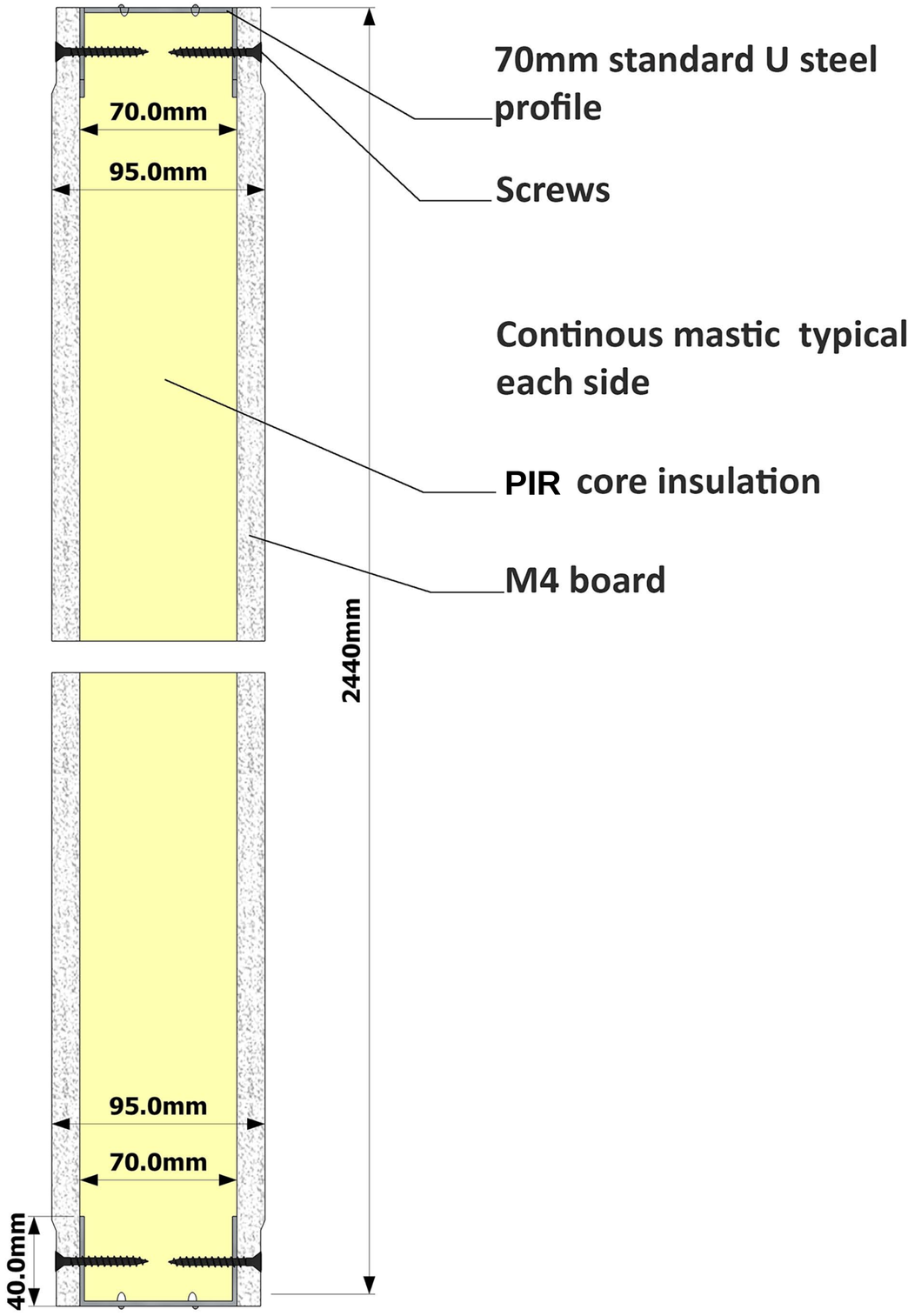

INTERNAL WALL DETAIL - 012

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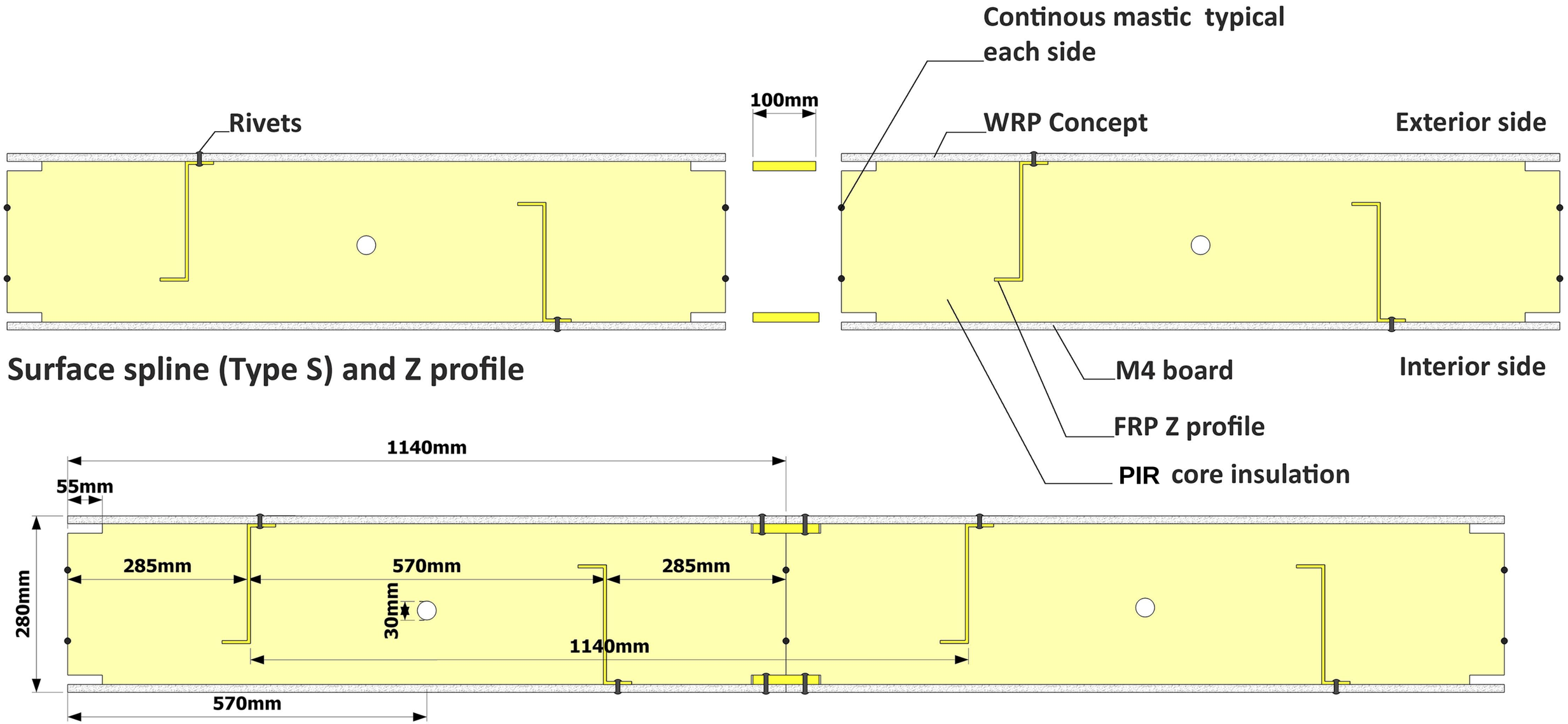

Surface spline (Type S) and Z profile

DETAIL 019 - Roof R67 - U value 0.08

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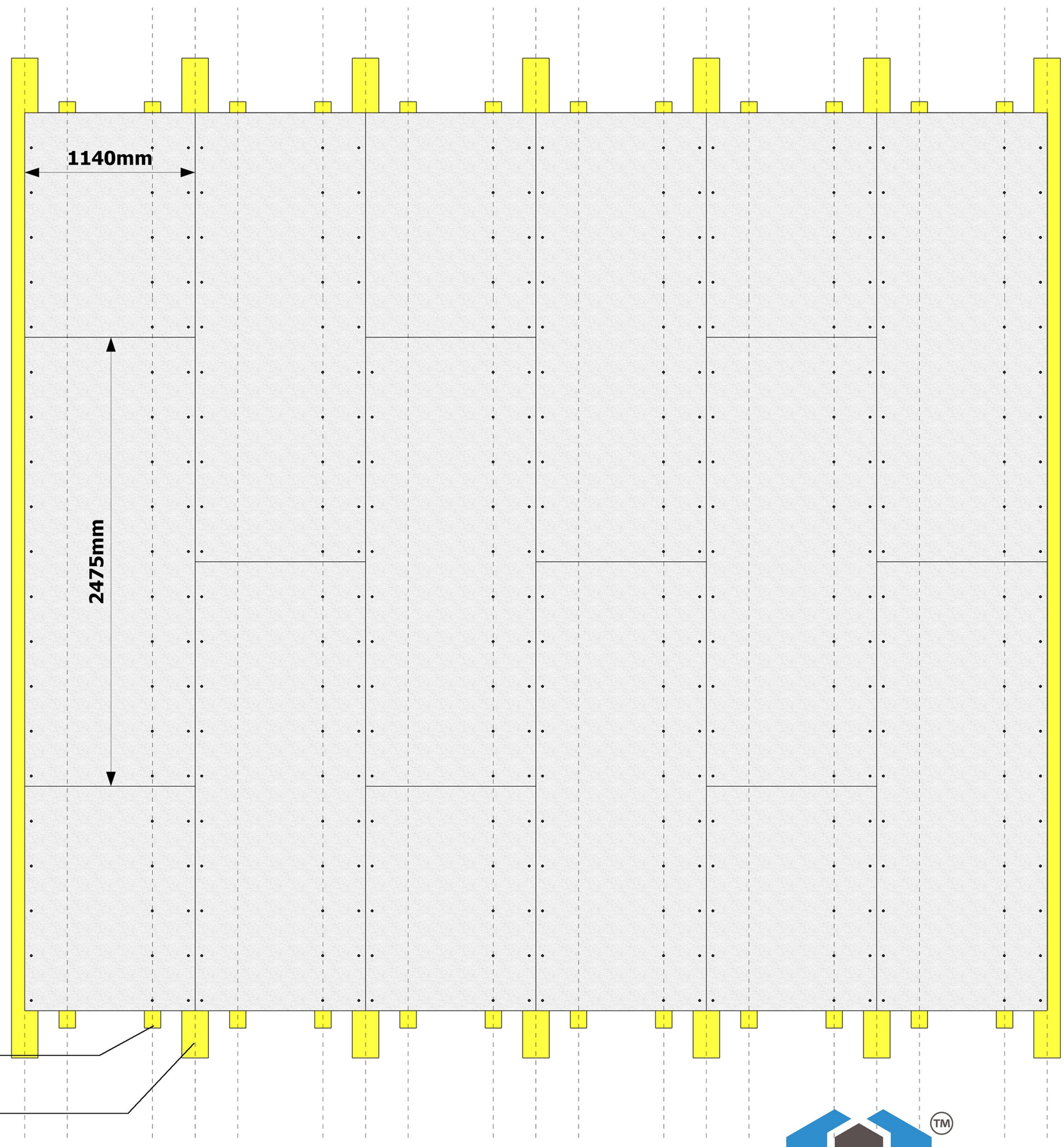

DETAIL 019A Roof scenario

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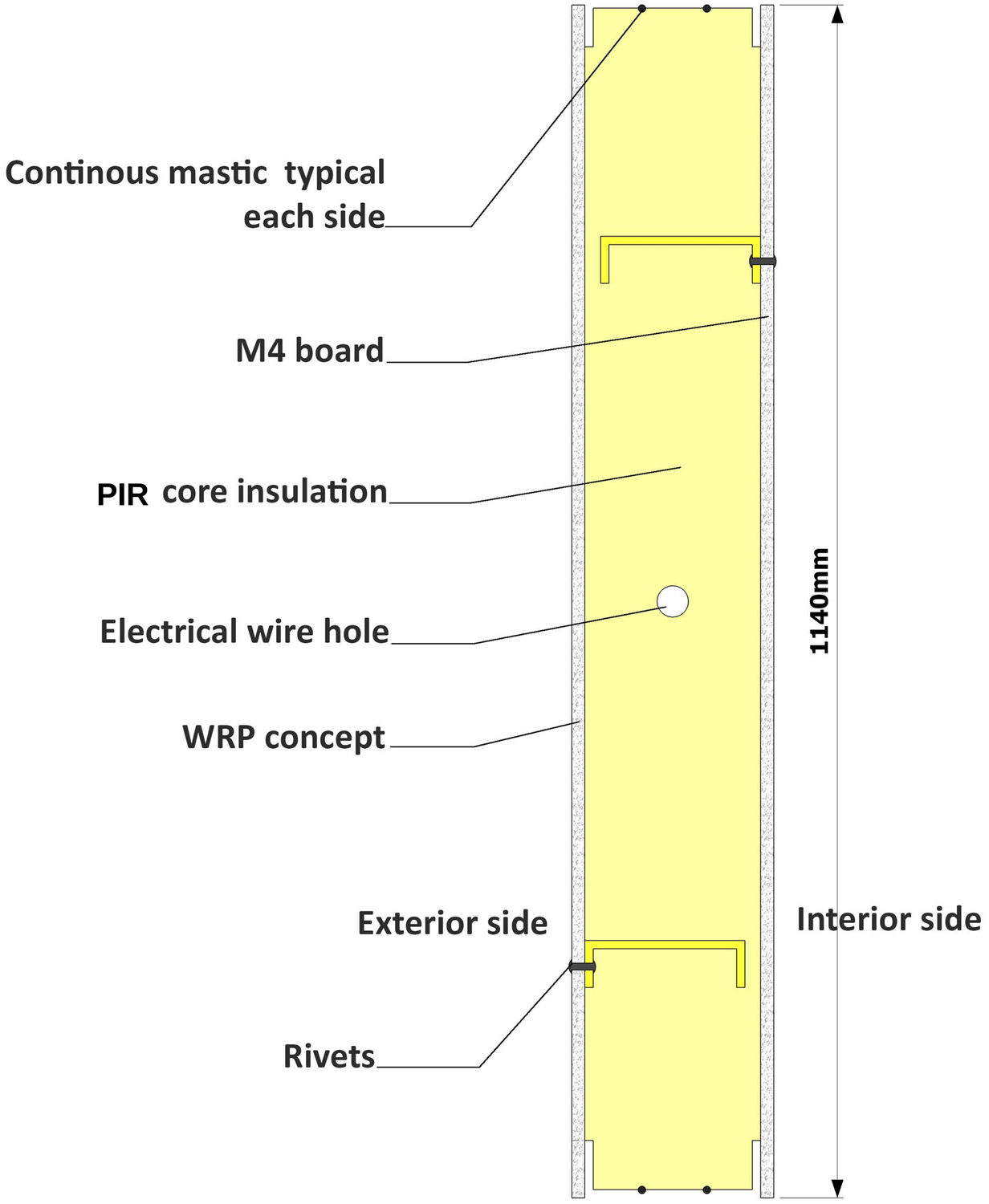
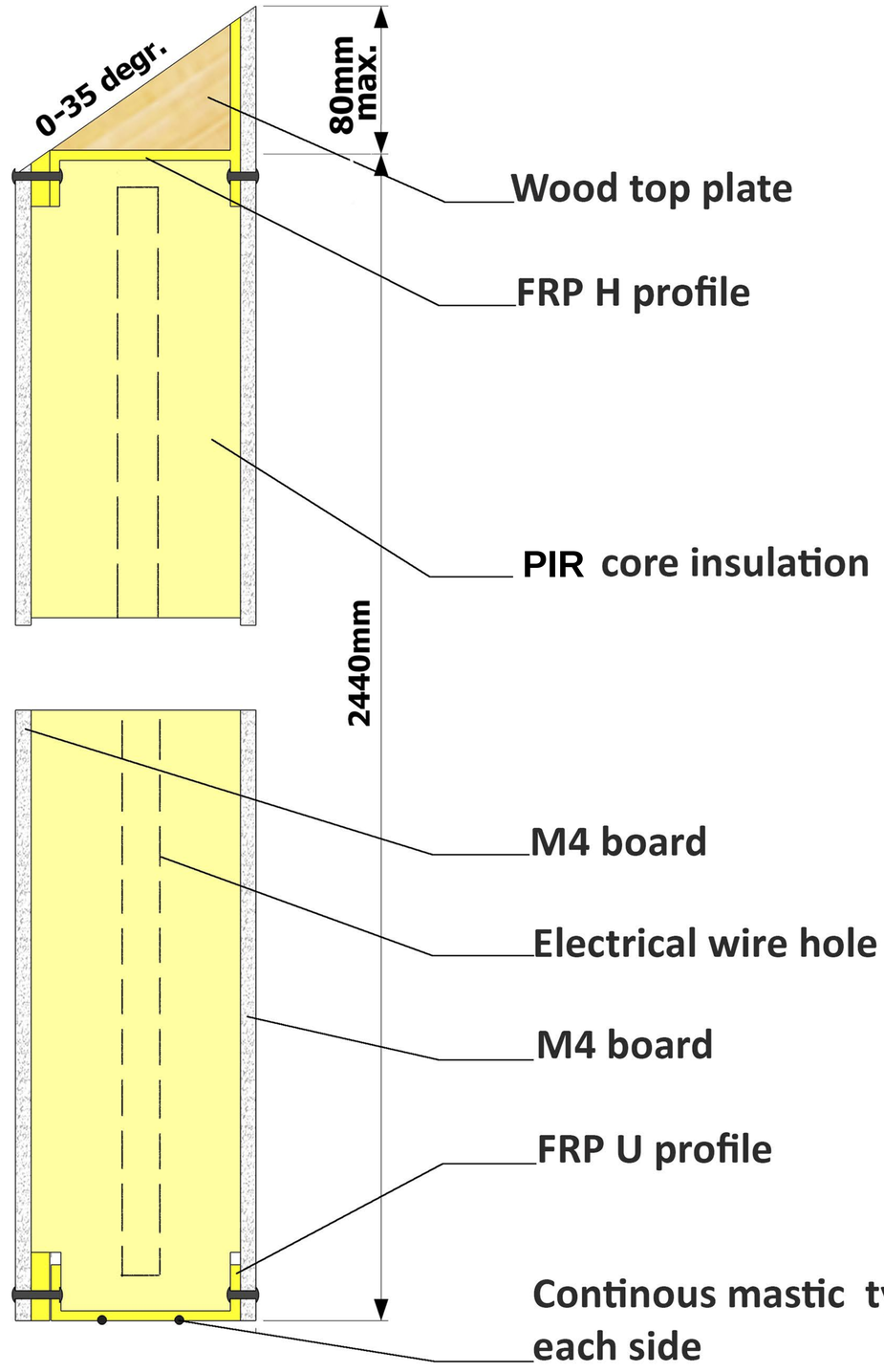
TOP VIEW



SECTION



WRP EXTERNAL WALL DETAIL - 020A

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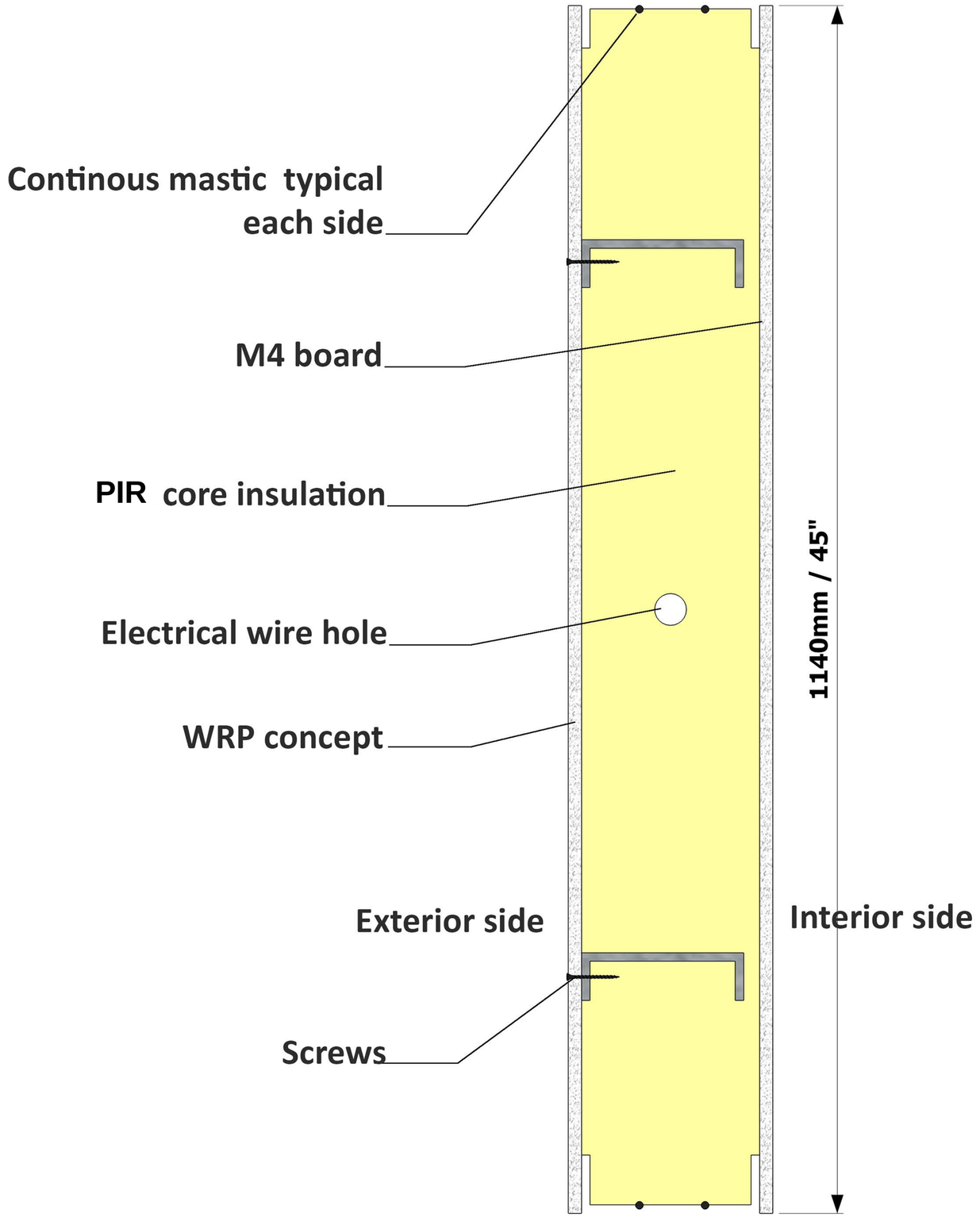
TOP VIEW



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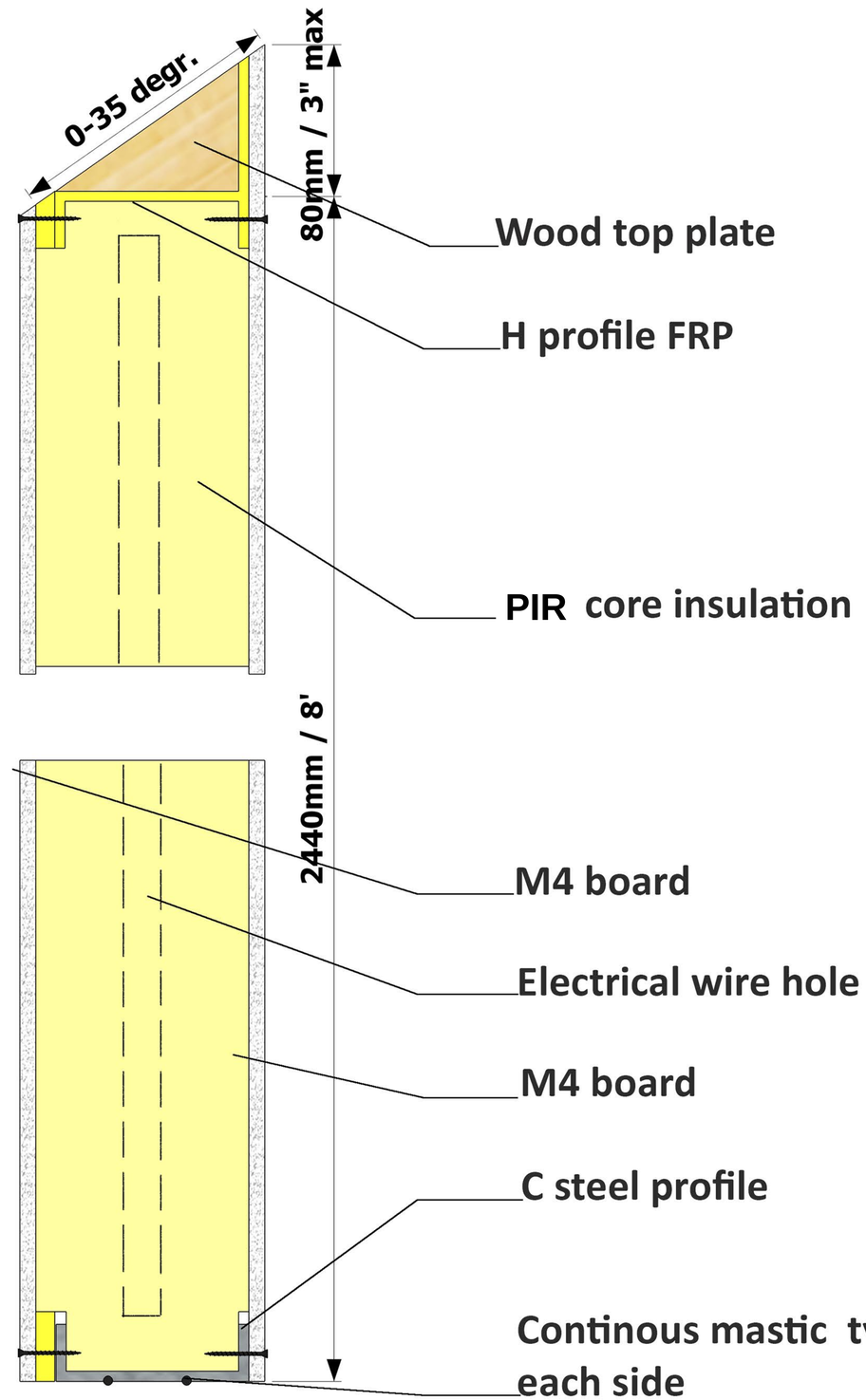

EXTERNAL WALL DETAIL - 020B

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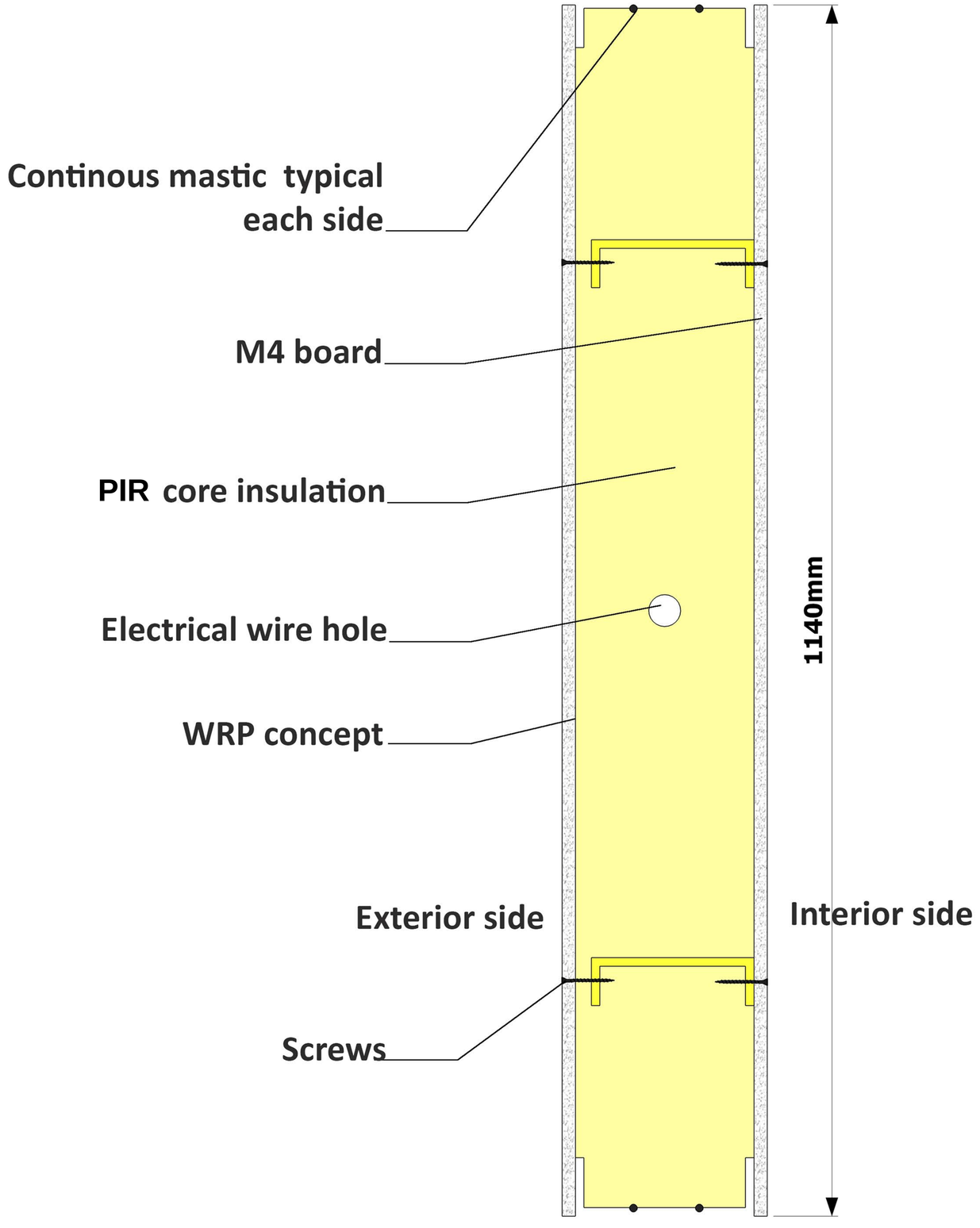
TOP VIEW



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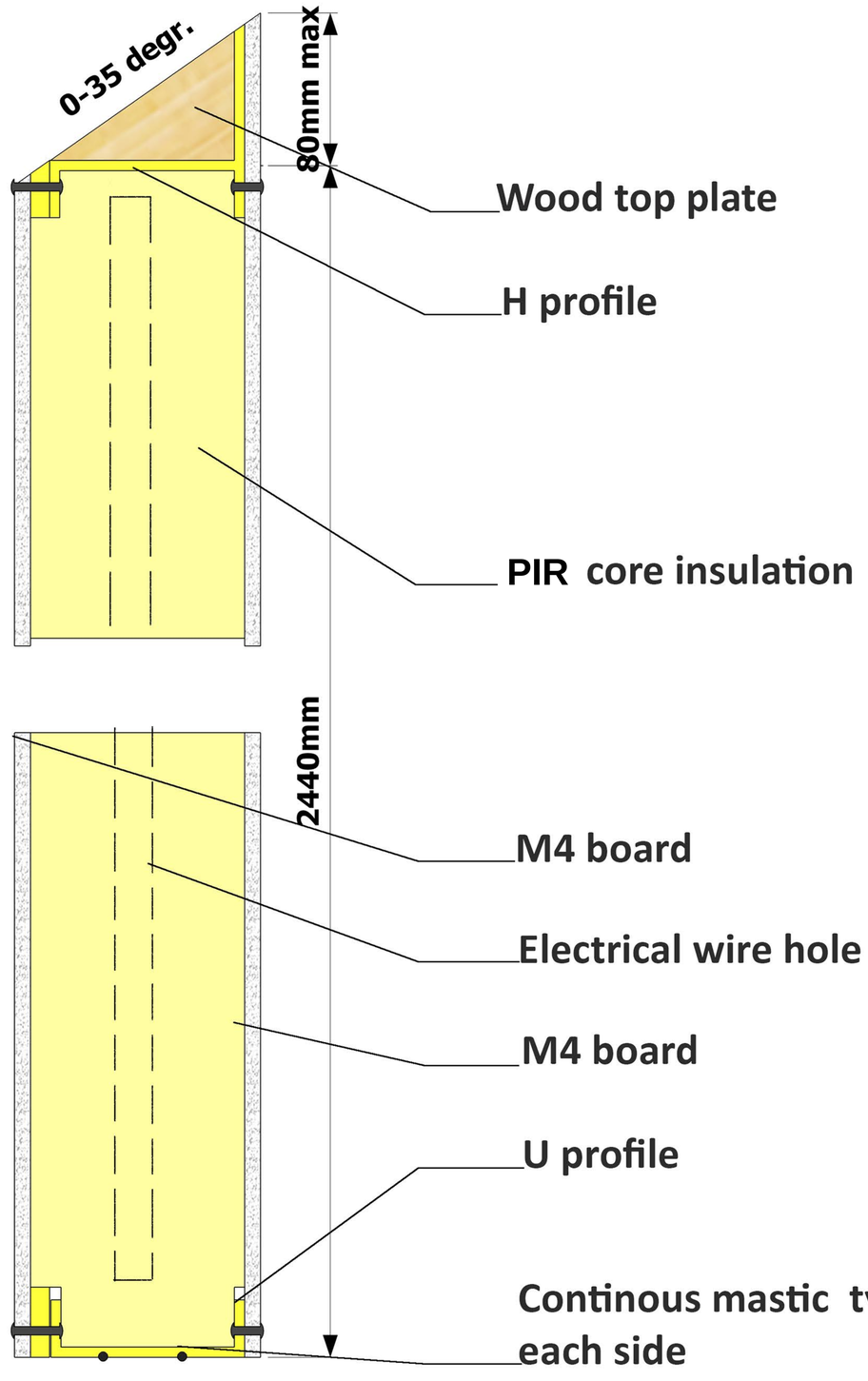

EXTERNAL WALL DETAIL - 020C

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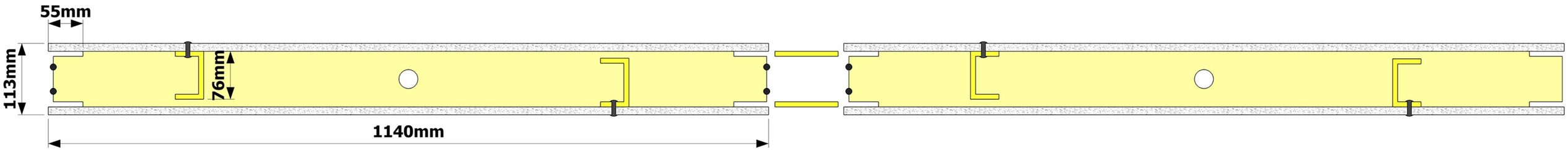
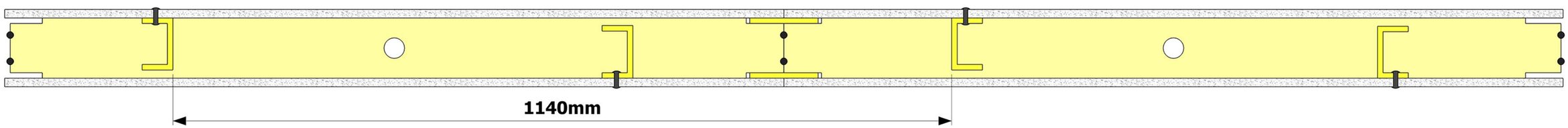


Surface spline (Type S) and U profile



DETAIL 021A External wall R24 - U value 0.23

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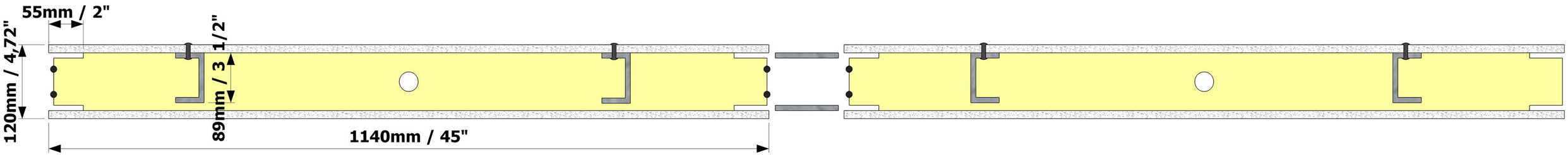
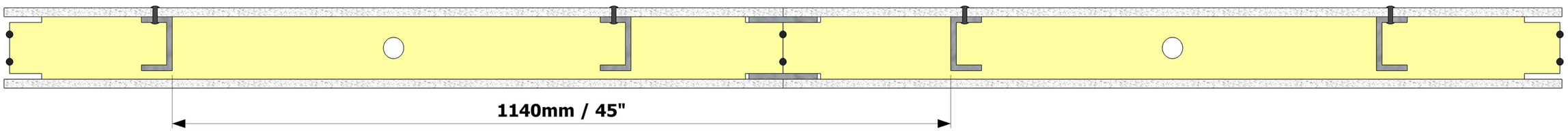


Surface spline (Type S) and U profile



DETAIL 021B External wall R24 - U value 0.23

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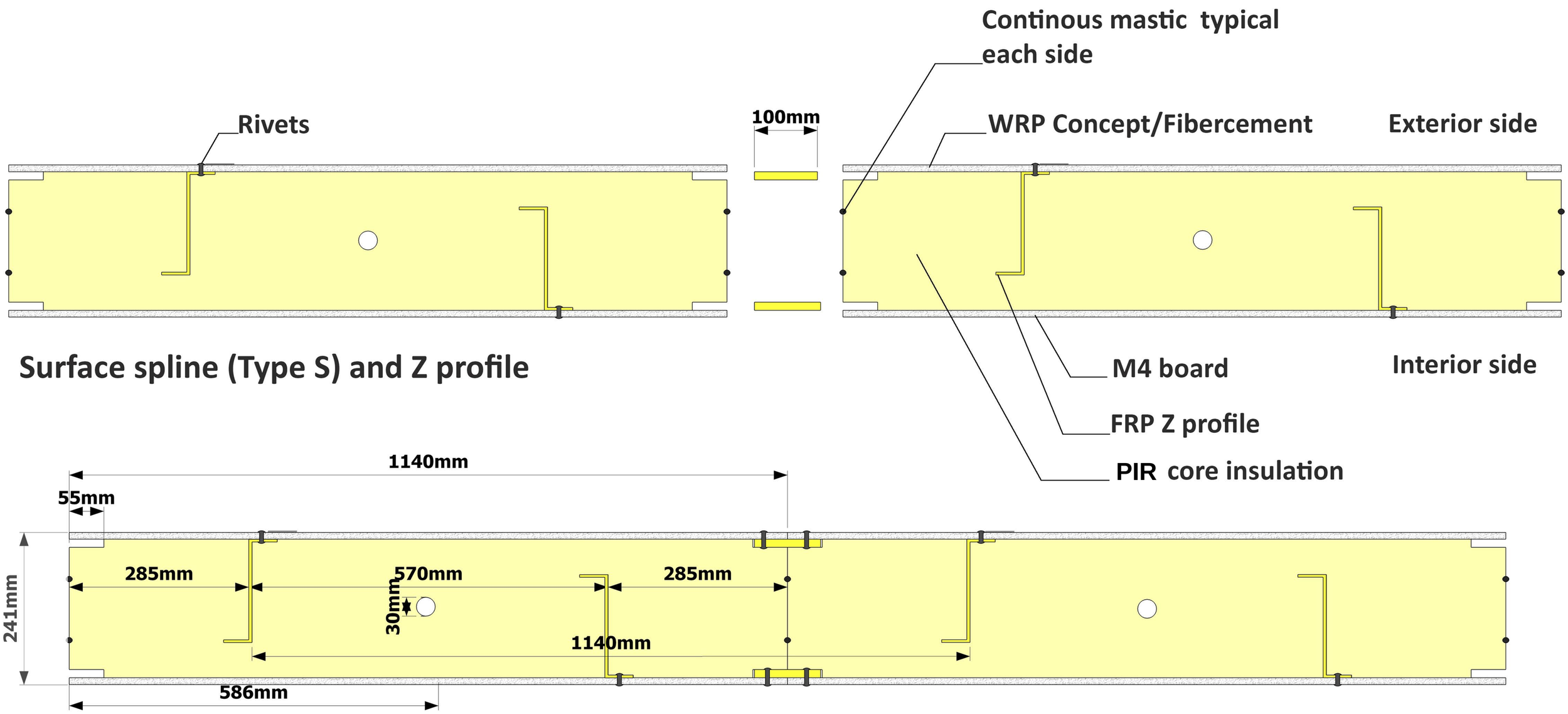

Surface spline (Type S) and Z profile

DETAIL 023 - Foundation R58 - U value 0.09

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