Element ICF Installation Guide Supplement

Document Title: **SUPPLEMENT** to the Element ICF Installation Guide **3rd Edition**
Addendum Number: addendum-01

Supplement Date: 07/17/26

Purpose

This supplement provides new and revised installation information from the **4th Edition** for use with the Element ICF Installation Guide, **3rd Edition**.

The attached sections are to be inserted into, or used in place of, the corresponding 3rd Edition sections. Where differences occur, this supplement takes precedence; all other 3rd Edition information remains applicable.

Summary of Changes

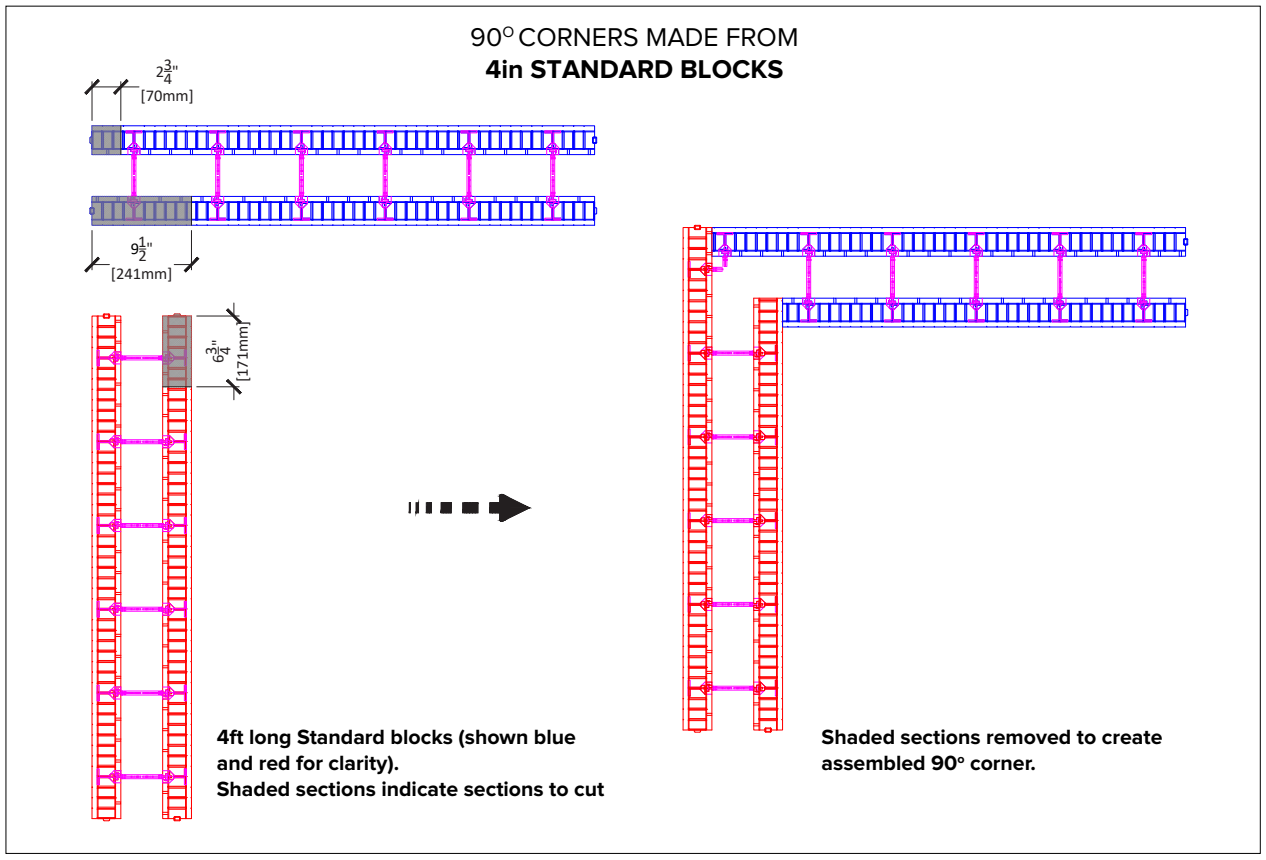
Item	Action	3rd Edition Reference	4th Edition Reference	Summary
1	Add	Section 2.8.7	Section 2.8.7.4	Creating 90-degree corners from Element Standard blocks.
2	Add	Section 2.8.7	Section 2.8.7.5	Creating uncommon or angled corners from Element Standard blocks.
3	Replace	Section 2.8.8	Section 2.8.8	Revised T-wall installation information, including additional support and an alternate construction method.
4	Revise	Appendix A	Appendix A	Additional and revised fastener types.
5	Add	After Appendix A	Appendix A2	Minimum fastener lengths, including fastening at outside corner blocks.
6	Revise	Various	Various	Important-note formatting and any technical note revisions that affect installation.
7	Editorial	Various	Various	Editorial corrections. Include only those needed to prevent misunderstanding in the 3rd Edition.

2.8.7.4 – CORNERS FROM STANDARD BLOCKS

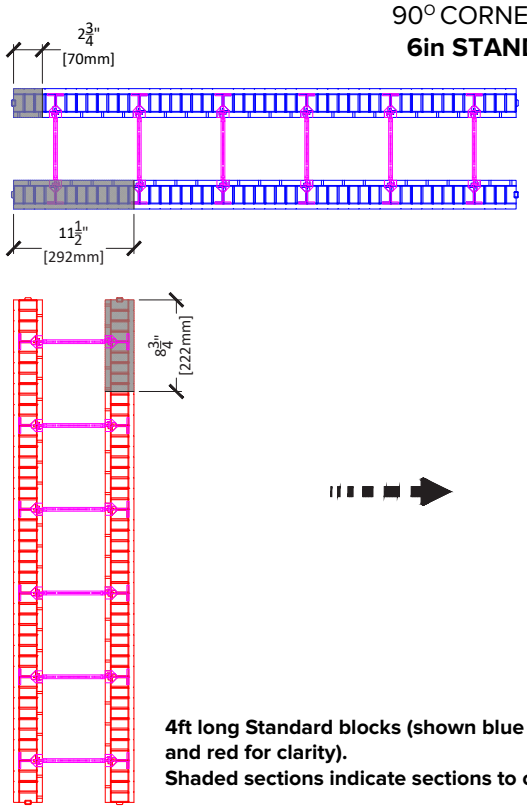
In cases where corner blocks run short near the completion of an ICF wall, 90° corners can be created using two Element Standard Preformed or Site-Assembled blocks instead of waiting for an additional shipment of corner blocks.

Referring to the illustrations below, cut the foam panels according to the dimensions shown for the applicable 4, 6, 8, 10, or 12 in. block. These dimensions help minimize waste and position the furring tabs as close as practical to both the inside and outside corners, providing suitable nailing surfaces for interior and exterior finishes.

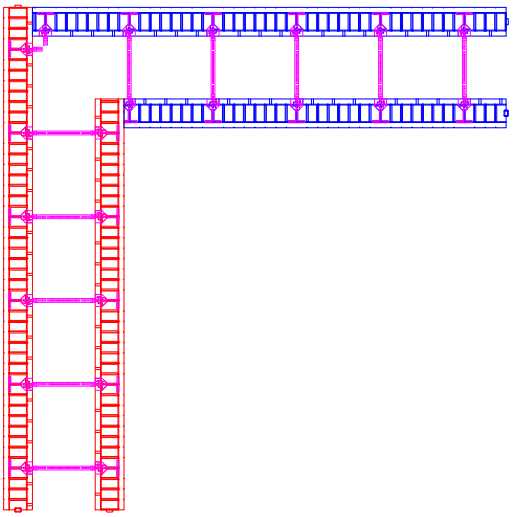
After assembling the corner, confirm that it is square, the concrete core remains continuous and unobstructed, the foam panels fit tightly, and the furring tabs are positioned close to both sides of the corner.



90° CORNERS MADE FROM **6in STANDARD BLOCKS**

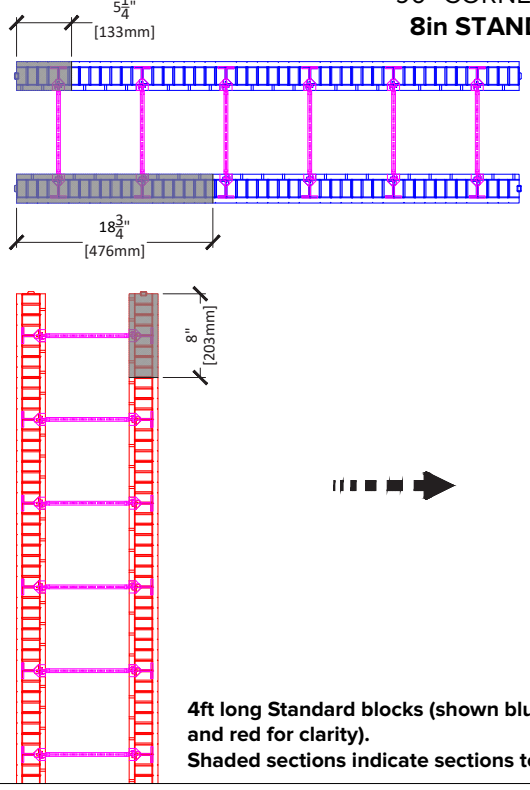


4ft long Standard blocks (shown blue and red for clarity).
Shaded sections indicate sections to cut

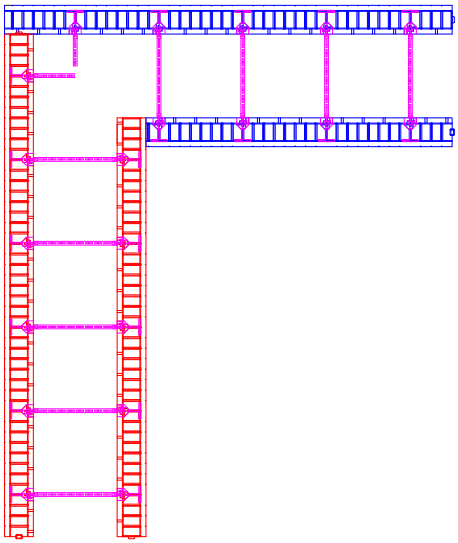


Shaded sections removed to create assembled 90° corner.

90° CORNERS MADE FROM **8in STANDARD BLOCKS**

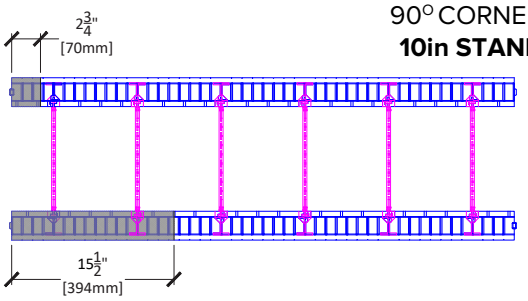


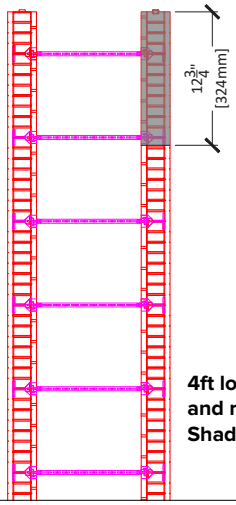
4ft long Standard blocks (shown blue and red for clarity).
Shaded sections indicate sections to cut



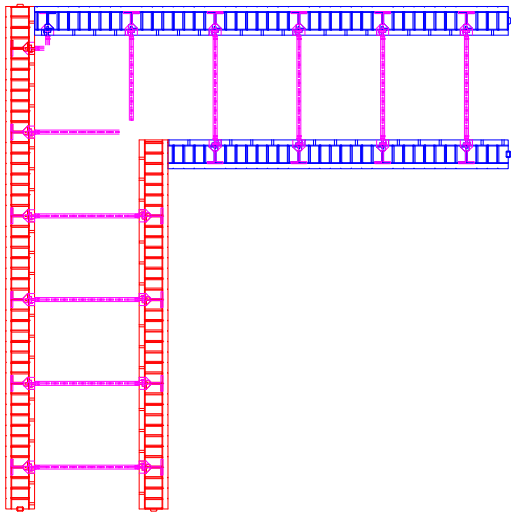
Shaded sections removed to create assembled 90° corner.

90° CORNERS MADE FROM **10in STANDARD BLOCKS**



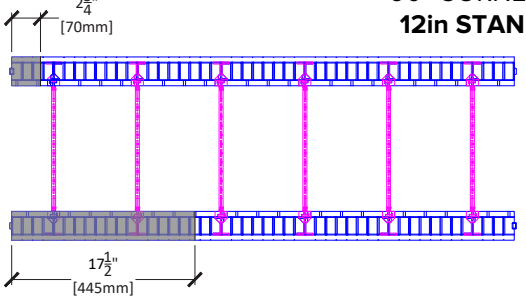


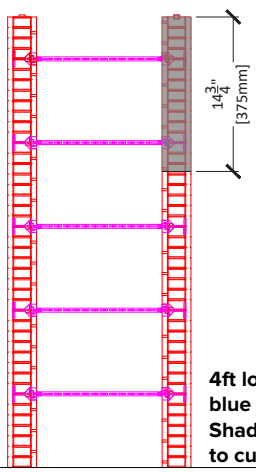
4ft long Standard blocks (shown blue and red for clarity).
Shaded sections indicate sections to cut



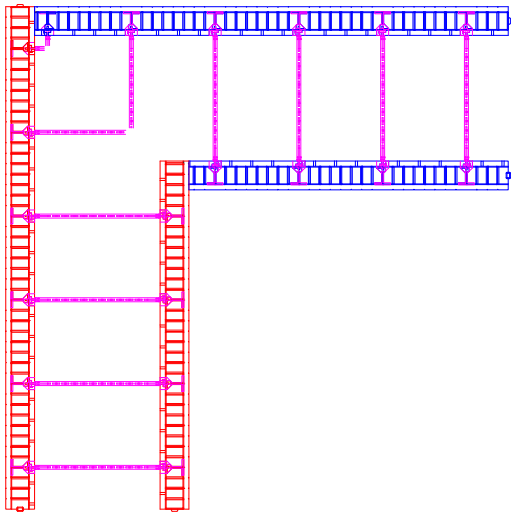
Shaded sections removed to create assembled 90° corner.

90° CORNERS MADE FROM **12in STANDARD BLOCKS**





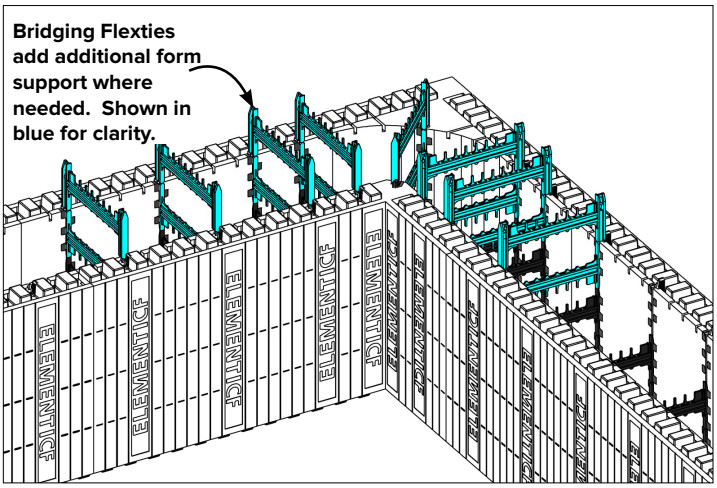
4ft long Standard blocks (shown blue and red for clarity).
Shaded sections indicate sections to cut

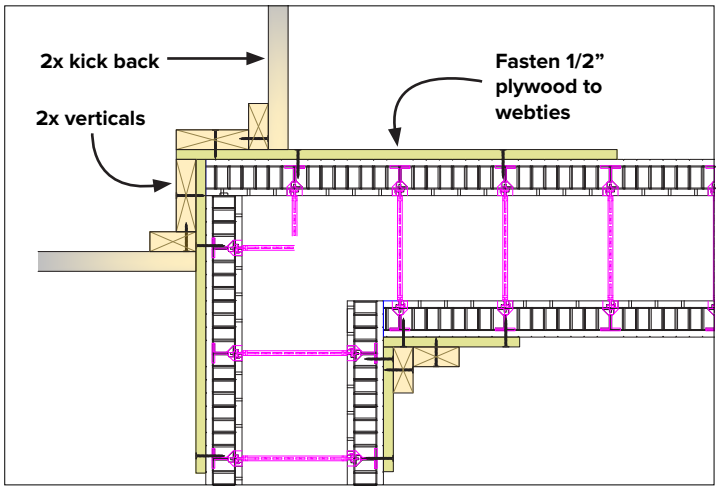


Shaded sections removed to create assembled 90° corner.

With Element Site-assembled blocks using bridging Flexties™ between courses will help strengthen the joints. Place as many bridging Flexties as needed. For more information on bridging Flexties see “2.8.2 – BRIDGING FLEXTIES™” on page 20.

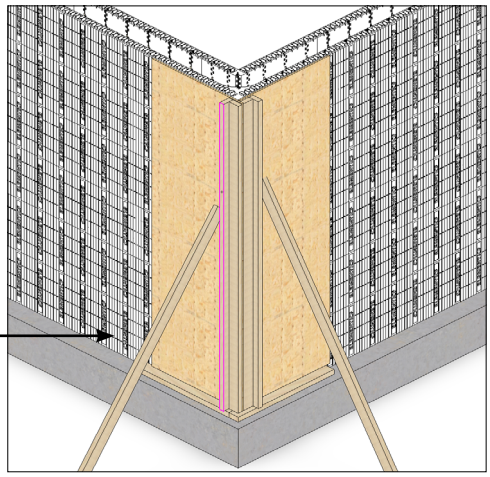
After installing the bracing and alignment system, provide additional support for the corner blocks. The illustration below demonstrates form support for a full-height wall. If corner blocks made with Standard blocks are only needed for the last few courses, wood strapping may be sufficient.

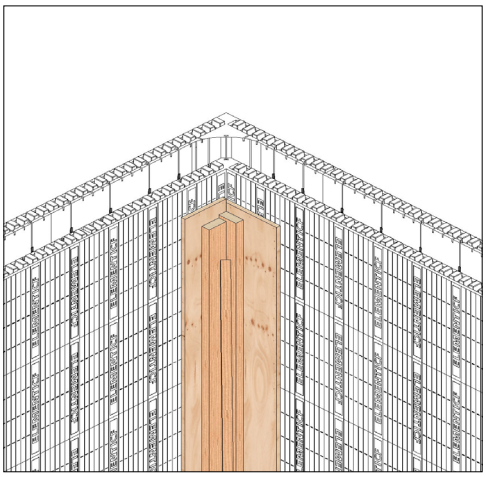




Provide corner form support after bracing and alignment system has been installed.

Foam fill any large gaps only after bracing and alignment system is in place.



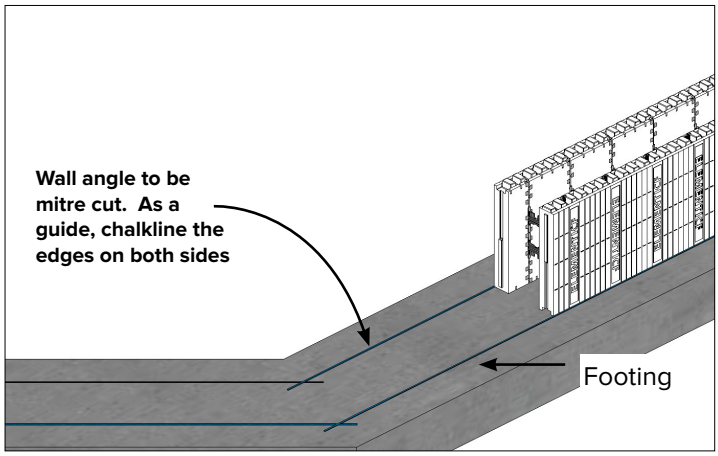


NOTES:

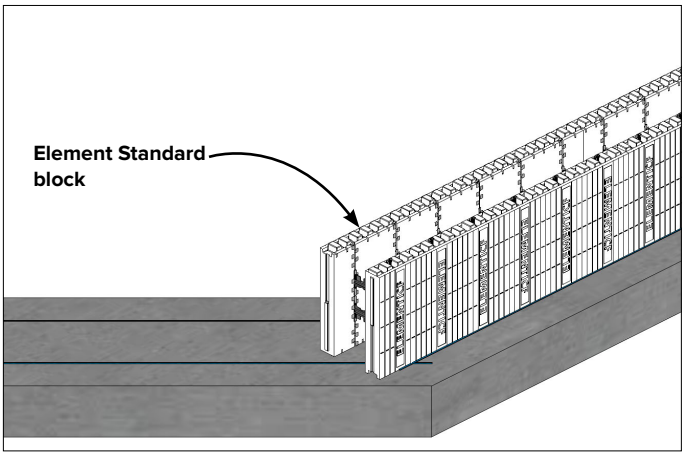
1. The above drawings illustrate an example of wall bracing. The builder should use sound judgment based on wall structure, pouring sequence and other site conditions, to determine if additional form support and bracing is required.
2. Avoid placing concrete directly into the corners.
3. Follow all required national and local wall brace safety regulations.

2.8.7.5 – UNCOMMON WALL ANGLES FROM STANDARD BLOCKS

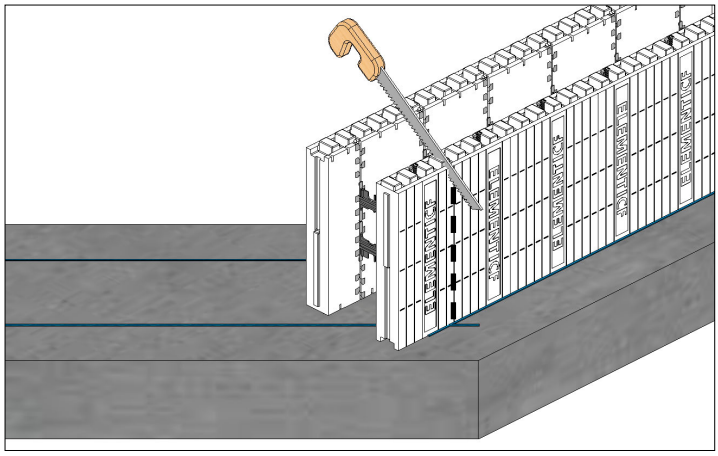
Element 90-degree corner blocks are available to quickly form ICF wall corners. When uncommon wall angles are required, angled wall corners can be created on site using miter cuts with Element Standard blocks.

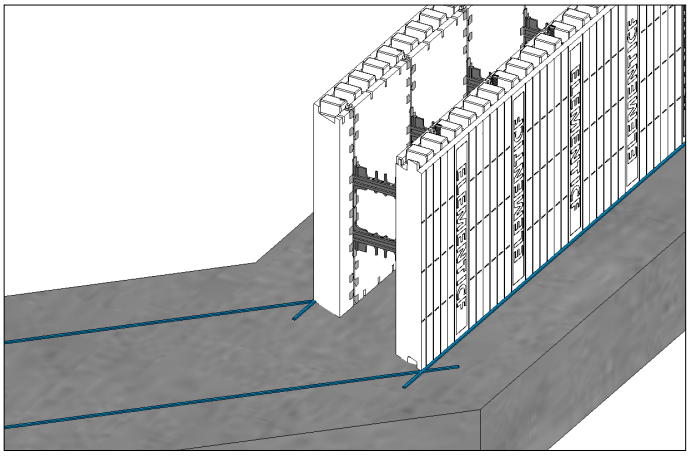


STEP 1: Start by laying the blocks from a typical 90 or 45 degree corner towards the wall angle to be mitre cut.

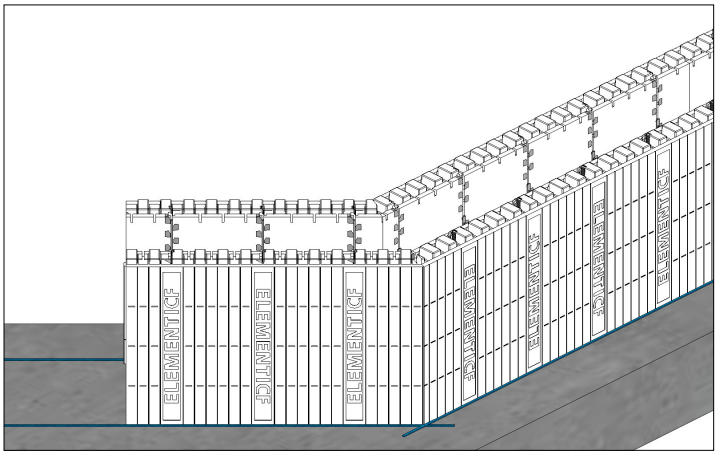


STEP 2: Using a Standard block, mark the angle on the standard block on both sides, and cut along the marks to create the mitre cut.

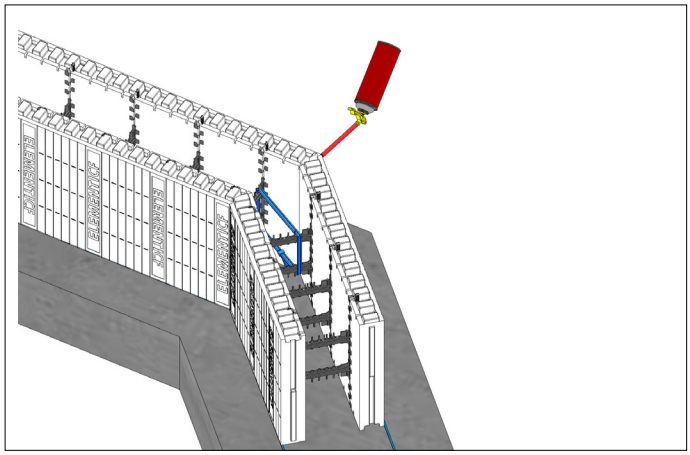




STEP 3: Cut along the marks to create the mitre cut.



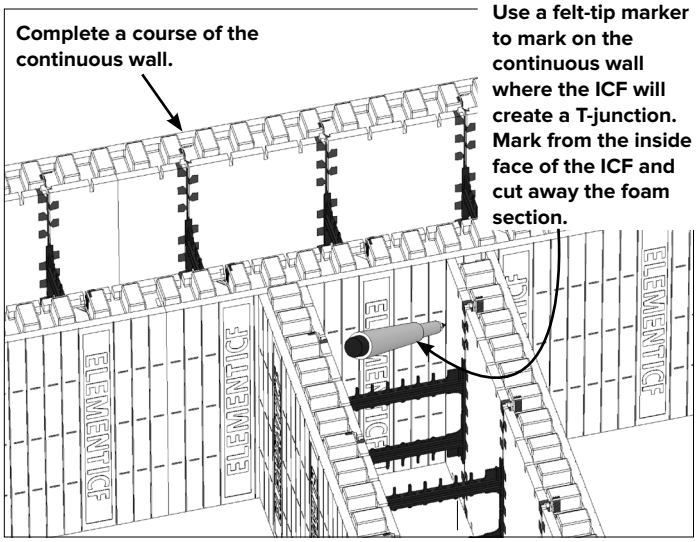
STEP 4: Flip the cut section of block and join the two ends to complete the angled corner.

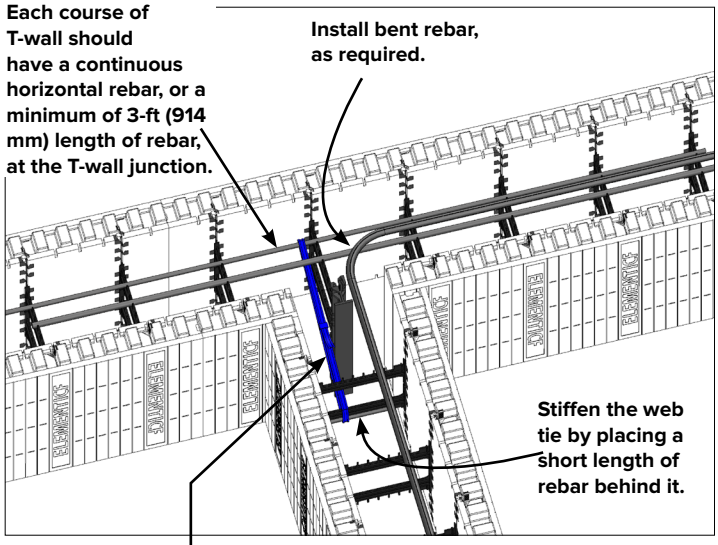


STEP 5: To secure the mitre joint, use zip ties, and apply foam adhesive.

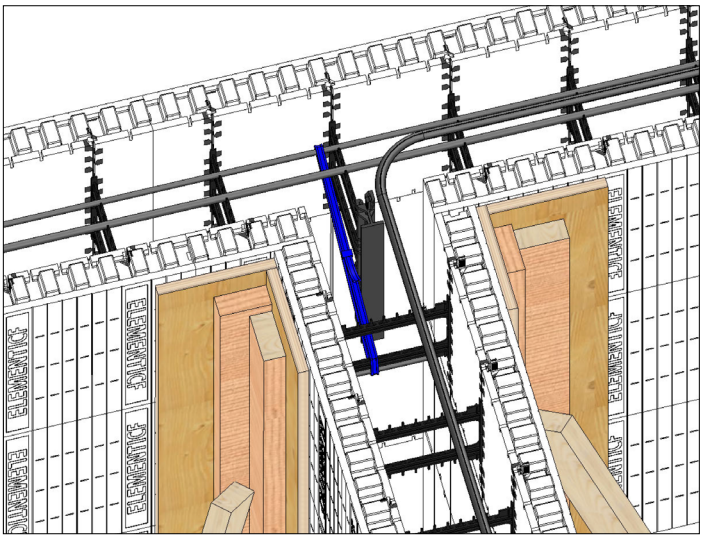
2.8.8 – TEE WALLS

Wall T-junctions can be constructed by field-cutting Element Standard blocks and providing proper form support.



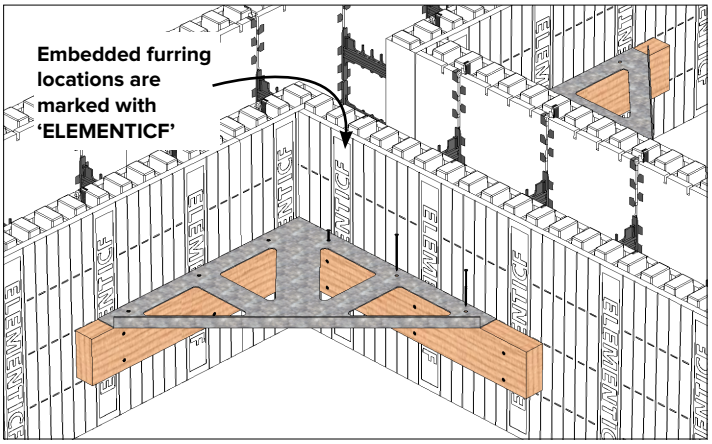


For each course use a zip tie or tie wire to support the ICF at the T-junction. Wrap the zip tie or tie wire around the horizontal rebar and to the Flextie closest to the T-junction.

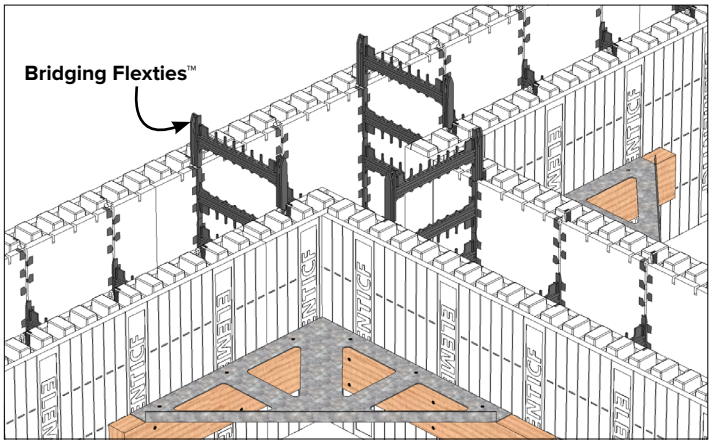


When the entire wall has been checked for plumb and square, apply foam adhesive to the butt joints, and install additional block support, as required. Using Bridge Ties can help potentially reduce the amount of block support required. See "2.8.2 – BRIDGING FLEXTIES™" on page 20.

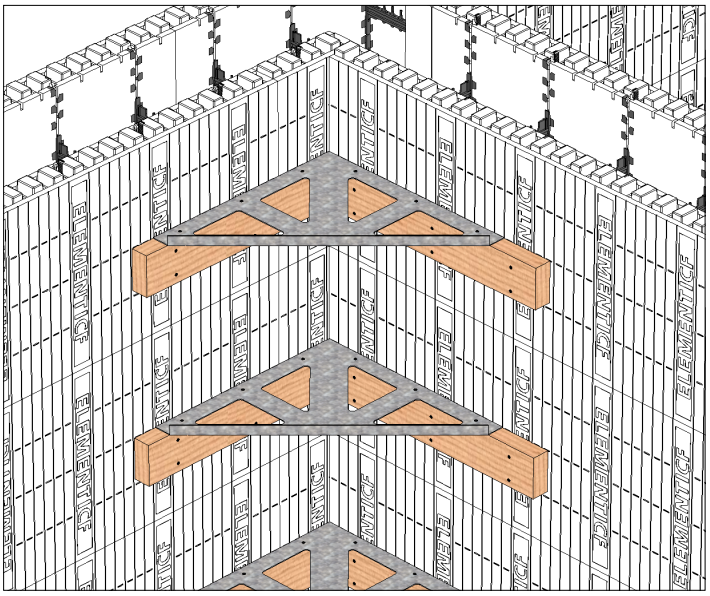
As an option, the Element Buck Brace can also be used to brace and support a fabricated T-wall. The Element Buck Brace is reusable, and its durable design allows for easy installation and positioning to help ensure a square, secure junction.



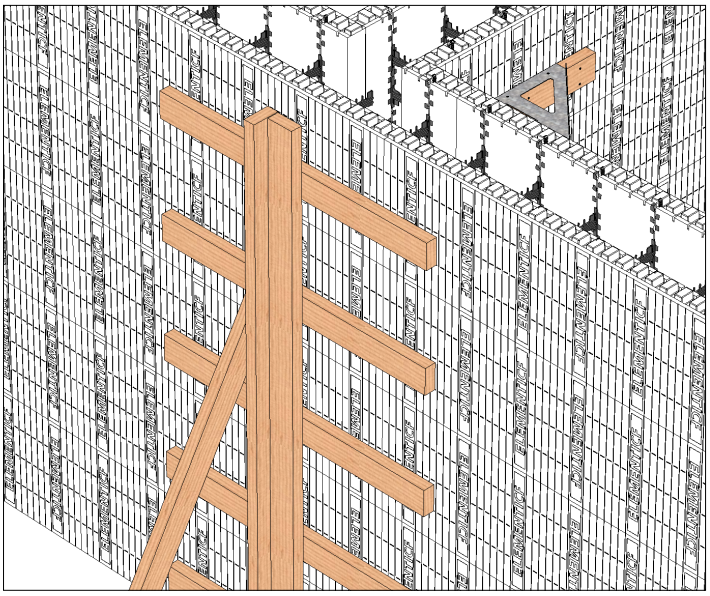
Attach intersecting wall to flanking wall. Screw 2x4 strapping to the embedded furring tabs within the block panels. The 2x4s should be long enough so that it is fastened to a minimum 3 furring tabs. Fasten the Element Buck Brace to the 2x4s making sure the Buck Brace is tight against the ICF. The Buck Brace should be installed on both sides of the t-wall.



If the t-junction is built with Element Site-assembled blocks, bridging Flexties™ can be used to provide additional form support between courses. For more information on bridging Flexties refer to the Element Installation Guide.



2x4 strapping and Buck Braces should be attached at every course of ICF installed. Make sure to add the required reinforcement as each course is installed.



Additional form support should be added to the back side of the t-wall junction.

Another option for constructing a T-wall is to build the continuous wall first, then remove the foam sections where the T-wall junction occurs and install the blocks required to complete the T-wall. This method requires pre-planning to ensure adequate reinforcement is provided at each course so the T-wall can be securely attached. All other applicable steps noted above should also be followed.

APPENDIX A – HOLDING POWER OF SCREWS FASTENED TO ELEMENT FURRING STRIPS

Web fastener withdrawal and shear testing using course and fine thread drywall screws. Tests were conducted on furring strips embedded 1/2-inch (13 mm) from the surface of the 2.75-inch (70 mm) Element EPS panels .

	Allowable Withdrawal Resistance[1]	Allowable Shear Resistance[2]
#6 x 1-5/8” Drywall Screw **Coarse**	33lb (15.0kg)	42 lb (19kg)
#6 x 1-5/8” Drywall Screw **Fine**	34lb (15.4kg)	39 lb (18 kg)
#8 x 2” Long Wood Screw	40 lb (18.2 kg)	46 lb (20.8 kg)
#10 x 2” Long Wood Screw	42.1 lb (19.1 kg)	30 lb (13.5 kg)
#8 x 2” Long Exterior Deck Screw	42.3 lb (19.2kg)	56lb 25.2kg)

1kg = 9.81 Newtons

1. Allowable withdrawal resistance values are based on a factor of safety of 5.
2. Allowable shear resistance values are based on a factor of safety of 3.2 within defined deflection limits (for more detailed information contact info@ Elementicf.com)

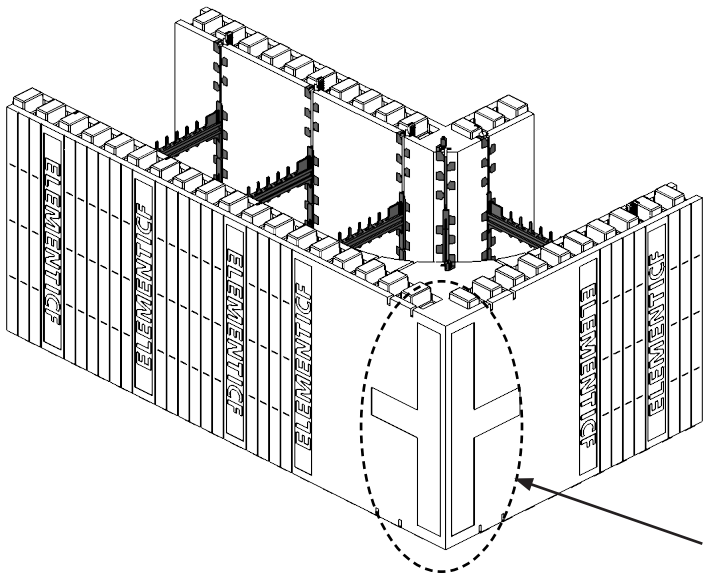
APPENDIX A.2 – MINIMUM FASTENER LENGTHS

Fasteners attaching finishes, furring, strapping, or fixtures to Element ICF must be long enough to pass through the applied material and the foam cover and still fully engage the embedded furring tab. Use minimum lengths in the table below.

More length is required at the outside corner of Element corner blocks, where the furring tab sits under deeper foam cover. Use the far right column for the outside corner face of corner blocks only; use the middle column for all other locations, including the straight legs and inside corner of corner blocks.

To use the table, measure the total thickness of the material being fastened over the ICF, find the matching row in the far left column, and read across. If your thickness falls between two rows, use the longer fastener.

Material Thickness Over ICF	Min. Fastener Length - all locations except outside corner of Corner Blocks[1]	Min. Fastener Length - outside corner of Corner Blocks only[2]
1/4”	1-1/2”	2”
7/16”	1-3/4”	2-1/4”
1/2”	1-3/4”	2-1/4”
5/8”	2”	2-1/2”
3/4”	2”	2-1/2”
1”	2-1/4”	2-3/4”
1-1/4”	2-1/2”	3”
1-1/2”	2-3/4”	3-1/4”



At outside corners of Element corner blocks, use the minimum fastener lengths listed in the far right column of the table above.