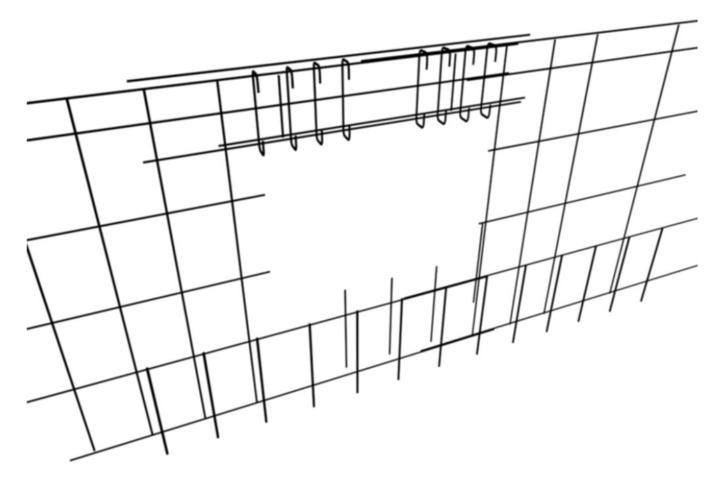
Step 1: Install lintel reinforcement around openings in compliance with Article 9.20.17.3 or 9.20.17.4 of the BCBC. In loadbearing flat insulating concrete form walls, lintels shall be provided over all openings wider than 900 mm in accordance with Tables A-17., A-18, or A-19. Lintels over openings greater than 1200 mm shall be reinforced with 10M stirrups at a maximum d/2 spacing where "d" is the distance from the top of the lintel to the level of the bottom reinforcing bar in the lintel. The reinforcing bars at the top and bottom shall extend 600 mm beyond the edges of the opening. The centre of the lintel may have a zone where no stirrups are required dependent on span and structural load. Stirrup requirements will be specified in tables provided by the manufacturer or by the project engineer.

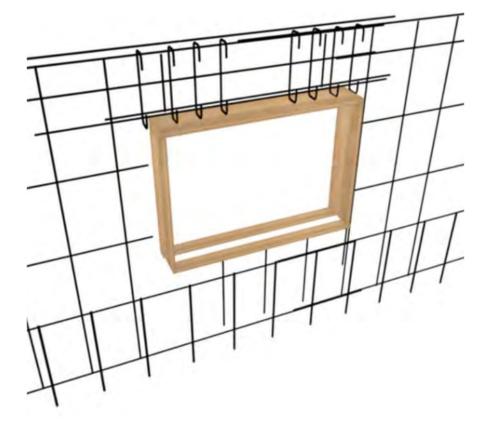


Construction Note:

The minimum horizontal reinforcing required for an ICF foundation wall is 10 M bars at 600 mm o.c. with one 10 M bar within the top 300 mm of the foundation wall. The requirements for the vertical reinforcing vary according to the width of the concrete and the height of the backfill and can be found in 9.15.4.5 of the BCBC. For ICF construction above the ICF foundation wall, lap ends of the vertical reinforcing must extend beyond the finished height of the foundation by at least the minimum overlap requirement of the bar (40 times the diameter of the bar). All reinforcing steel in the foundation must be located on the interior side of the centre line of the concrete and must allow for a minimum of 30 mm of concrete cover for protection from corrosion.

Building Envelope Guide for Houses

Window Lintel



Step 2: Install window buck. Allow for a minimum of 30 mm of concrete cover over reinforcing steel for protection from corrosion.

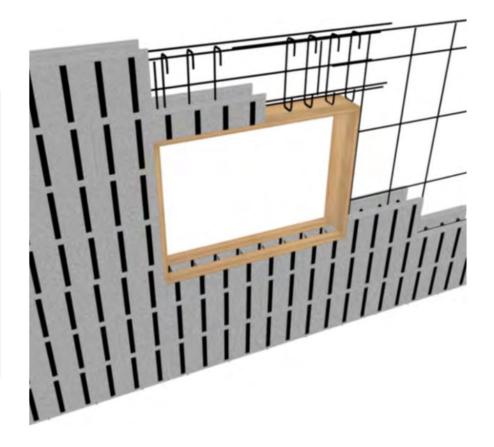
Note:

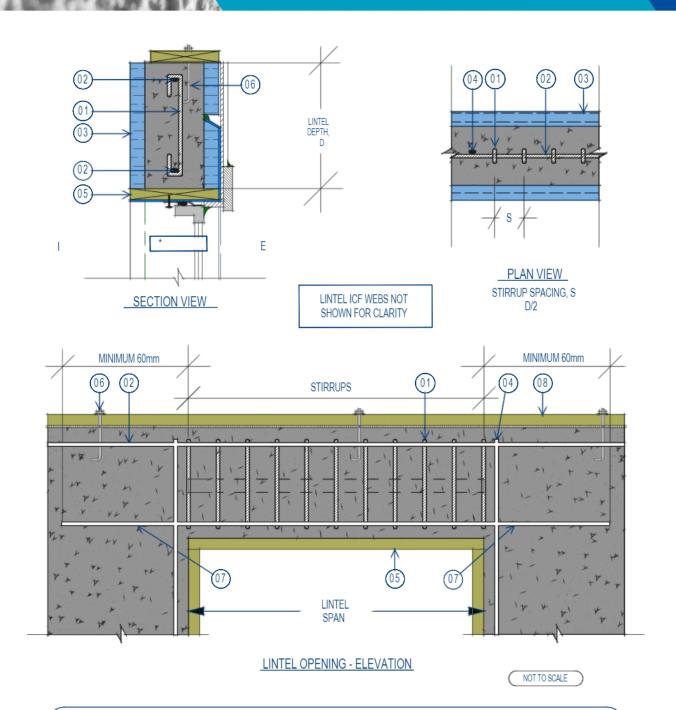
This is a view of the rebar, lintel and buck configuration with the polystyrene removed for clarity. The lintel reinforcing bars shall extend 600 mm beyond the edge of the concrete opening exclusive of the window bucks and the stirrups configured as per the lintel tables as per the BCBC, the manufacturer, or engineer's specifications.

Notes:

While a full buck is illustrated here, it is for reference only. Preferred buck configurations can be found in Section 3.6.04 of this Guide.

The fastening strips are exaggerated for clarity in this illustration. In actual practice, they are fully embedded beneath the surface of the ICF EPS form material.





LEGEND

- 01. STIRRUP SPACING (S) = LINTEL DEPTH (D) / 2
- 02. REBAR TOP & BOTTOM AS PER 9.20.17.3 & 9.20.17.4
- 03. ICF FORM
- 04. WALL VERTICAL REBAR

- 05. TREATED WOODEN BUCKS, OR PROPRIETARY BUCKS
- 06. ANCHOR BOLTS AS PER CODE
- 07. LINTEL REBAR MIN. PROJECTION, 600mm / 24", BEYOND OPENING
- 08. SILL PLATE W/ CLOSED CELL GASKET

*NOTE 1: SHOWN WITH WINDOW. ALSO APPLICABLE TO DOOR OPENINGS.

FLAT INSULATING CONCRETE FORM WALLS (ICF) DETAIL 3.6.03 WINDOWS - LINTEL ASSEMBLY

FOR ILLUSTRATION PURPOSES ONLY - NOT FOR CONSTRUCTION