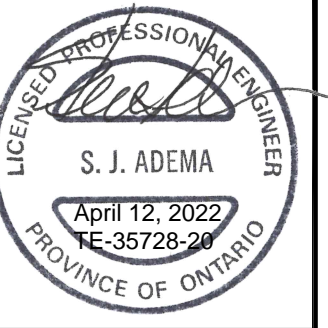


These documents are instruments of service and are the copyright property of Tacoma Engineers. They may not be reproduced, altered or reused without the expressed written consent of Tacoma Engineers Inc.

Date	Issue
MARCH 7 2022	ISSUED FOR CONSTRUCTION



**TACOMA ENGINEERS**  
 176 Speedvale Avenue West  
 Guelph, Ontario N1H 1C3  
 Tel: 519.763.2000 Fax: 519.824.2000  
 www.tacomaengineers.com

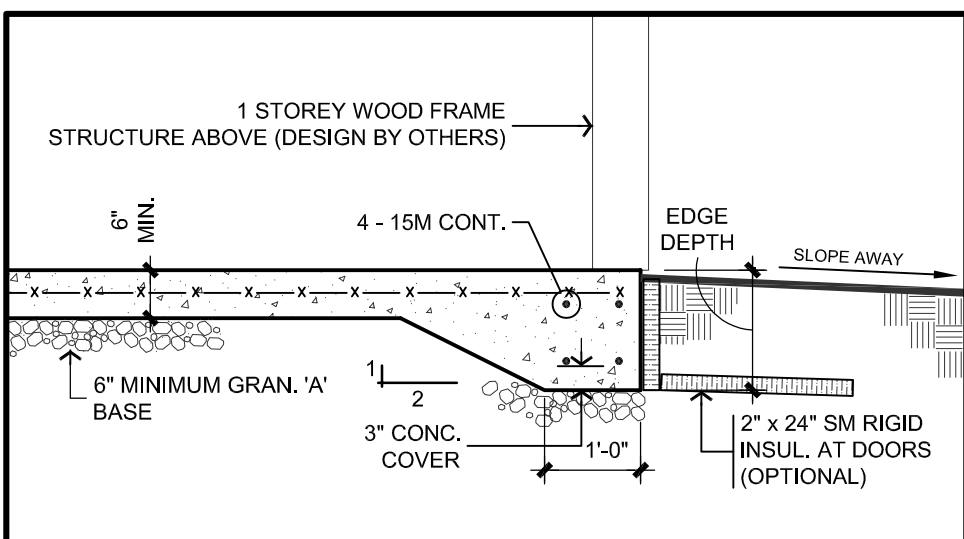


Client  
**TYPICAL FLOATING SLAB**  
 ONTARIO

Drawing  
**FOUNDATION PLAN & NOTES**

Scale 1/8" = 1'-0"	Dwg. # <b>S1</b>
Date MARCH, 2022	
Drawn By JDH	
Project No. TE-24182-14	

- DIRECTIONS FOR USE:**
- THIS FLOATING SLAB FOUNDATION DESIGN IS FOR A 1 STOREY WOOD STUD FRAMED STRUCTURE WITH NO MASONRY OR OTHER FINISHES SUSCEPTIBLE TO CRACKING.
  - DETERMINE THE LARGER BUILDING DIMENSION, LENGTH OR WIDTH AND SELECT EDGE DEPTH FROM TABLE 1. NOTE: SLAB DESIGN IS NOT AFFECTED BY SPAN OF ROOF FRAMING ABOVE.
  - TO INCLUDE ATTIC TRUSSES ADD THE WIDTH OF THE ROOM TO BOTH THE LENGTH AND WIDTH.
  - TO ADD UP TO 48" OF MASONRY VENEER AROUND THE PERIMETER, INCREASE EDGE DEPTH BY 2", INSTALL VERTICAL CONTROL JOINTS IN VENEER AT MAX. 8'-0" O.C.
  - BUILDINGS THAT DO NOT MEET THE ABOVE CRITERIA SHALL NOT USE THIS DETAIL.



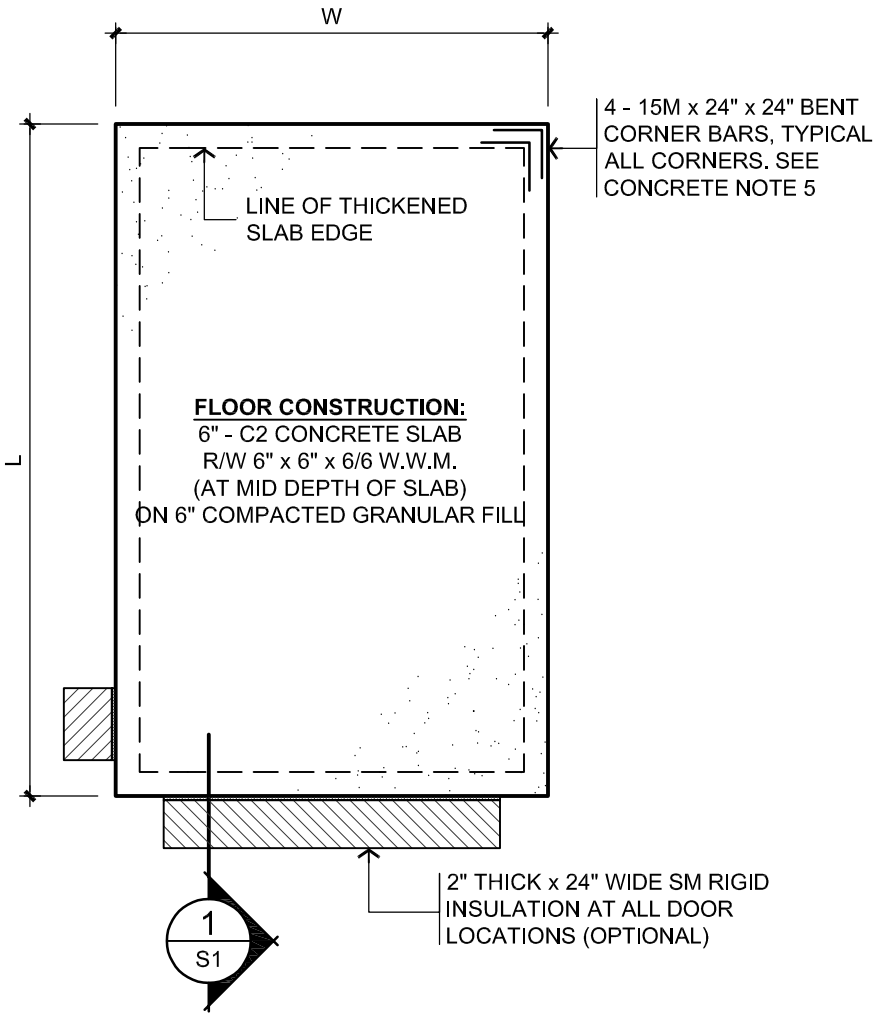
**1**  
**EDGE DETAIL AT DOOR OPENING**  
 SCALE: 1/2" = 1'-0"

**EXAMPLE 1:**  
 18'-0" x 36'-0" WITH 4'-0" BRICK VENEER.

FROM TABLE 1, FOR 36'-0" → SELECT 17" EDGE THICKNESS  
 FOR BRICK VENEER ADD 2" TO EDGE THICKNESS  
 ∴ INSTALL SLAB WITH A 19" EDGE THICKNESS

**EXAMPLE 2:**  
 24'-0" x 30'-0" WITH ATTIC TRUSS (12'-0" WIDE ROOM IN TRUSS SPACE)

EFFECTIVE SLAB DIMENSIONS (24'-0" + 12'-0") = 36'-0"  
 AND (30'-0" + 12'-0") = 42'-0"  
 EFFECTIVE SLAB DIMENSION IS OFF THE CHART ∴ USE OF THIS PLAN IS NOT PERMITTED.



**FOUNDATION PLAN**  
 SCALE: 1/8" = 1'-0"

**TABLE 1**

LARGEST DIMENSION	EDGE DEPTH
MAX. 20'-0"	13"
MAX. 24'-0"	14"
MAX. 28'-0"	15"
MAX. 32'-0"	16"
MAX. 36'-0"	17"
MAX. 40'-0"	18"

**NOTE:**  
 FOR FOUNDATIONS WITH GREATER THAN 40'-0" DIMENSIONS, FOUNDATION DESIGN MUST BE COMPLETED BY A PROFESSIONAL ENGINEER

**GENERAL NOTES:**

- THIS DESIGN HAS BEEN COMPLETED TO THE 2012 ONTARIO BUILDING CODE.
- CONTACT TACOMA ENGINEERS FOR CONSTRUCTION REVIEWS AS REQUIRED BY THE LOCAL MUNICIPALITY.
- THIS FOUNDATION DESIGN SHALL NOT BE USED IN GEOGRAPHIC AREAS SUBJECT TO TERMITE INFESTATION.

**SITE & SOILS:**

- PREPARE THE AREA FOR PROPOSED STRUCTURE BY REMOVING ALL TOPSOIL AND ORGANIC MATERIAL FROM THE AREA OF THE BUILDING.
- SLOPE FINAL GRADE AWAY FROM THE BUILDING.
- BEAR SLAB ON GRANULAR FILL (6" MINIMUM) TO 98% STANDARD PROCTOR DENSITY OR 3/4" CRUSHED STONE ON SOUND ORIGINAL (NATIVE) SUBGRADE.
- SUBGRADE SHALL BE SUITABLE FOR 75 kPa (1500 psf) SAFE BEARING.

**CONCRETE:**

- CONCRETE WORK SHALL CONFORM TO CAN/CSA-A23.1,2,3 FOR MATERIALS AND WORKMANSHIP.
 

CLASS OF CONCRETE	STRENGTH	W/C RATIO	AIR ENTRAINMENT
C2	32 MPa	0.45	5 - 8%
- ALL CONCRETE SHALL BE KEPT MOIST DURING THE FIRST THREE DAYS OF CURING. DO NOT ADD WATER TO CONCRETE ON SITE.
- ALL REBAR SHALL BE DEFORMED BARS WITH A MINIMUM YIELD STRENGTH OF 400 MPa. ALL LAP LENGTHS AS FOLLOWS:
 

A:	10M BARS	450mm (18")
B:	15M BARS	600mm (24")
- PROVIDE A MINIMUM 9" LAP FOR WELDED WIRE MESH.
- PROVIDE CONTINUOUS REINFORCING AROUND CORNERS WITH 15Mx24"x24" BENT DOWELS (FOUR DOWELS PER CORNER).
- DO NOT SAWCUT SLAB.

**INSULATION:**

- ALL INSULATION SHALL BE EXTRUDED POLYSTYRENE FOAM (XPS) TYPE IV, V, VI OR VII WITH A MINIMUM NOMINAL R-VALUE OF R5 / INCH.