

Grant/ Sheridan Building Development
Physical address: 3022 E. Surrey Rd Clare, MI 48617
Office/ Inspection Line: 989-339-4274

Eric Cotton, Building Official: buildingofficial@grant-township.org
Kerry Gross, Administrative Assistant: clerk@grant-township.org

Permit No: _____
Payment Method:
___ Cash ___ Check
Check No: _____

TO PREVENT THE DELAY OF THE ISSUANCE OF THE PERMIT, PLEASE FILL OUT THE APPLICATION COMPLETELY.

Separate applications may need to be completed for soil erosion, well & septic, plumbing, mechanical and electrical permits.

APPLICANT

☐ OWNER ☐ BUILDER ☐ ARCHITECT/ENGINEER ☐ AGENT

The architect, engineer or agent must provide written authorization from the owner to apply for a building permit. The authorization must include the architect, engineer or agent name, address and telephone number.

PROJECT INFORMATION/LOCATION

Project Name:		Address:	
City/Village/Township:		Property ID Number:	
Side of Road: N ☐ S ☐ E ☐ W ☐	Cross Roads: BETWEEN _____ AND _____		
Subdivision and Lot Number		Parcel Size:	

IDENTIFICATION OF OWNER OR LESSEE

The owner will be the designated contractor and the permit holder for this project ☐ Yes ☐ No			
Name:		Address:	
City:	State:	Zip Code:	Telephone:
Driver's License/I.D. Number:		Date of Birth:	Fax:

IDENTIFICATION OF ARCHITECT/ENGINEER

Contact Person:		Business Name:	
Street or PO Box:		City:	State: Zip:
Telephone:	Email:	Fax:	
Professional License Number:		Expiration Date:	

IDENTIFICATION OF BUILDING CONTRACTOR

☐ WILL BE THE PERMIT HOLDER ☐ WILL NOT BE THE PERMIT HOLDER AND IS ACTING AS A SUB-CONTRACTOR ONLY			
Contractor's Name:		Professional License Number	Expiration Date:
Driver's License/I.D. Number:		Date of Birth:	
Business Name:		Street Address or PO Box:	
City:	State:	Zip:	Email:
Telephone:		FEIN or reason for exemption:	
MESC Number or reason for exemption:		Workers Comp. Ins. Carrier or reason for exemption:	

PLAN REVIEW (CCCS WILL ASSIST YOU IN DETERMINING WHICH TRADES APPLY TO YOUR PROJECT)

☐ Building	☐ Electrical	☐ Mechanical	☐ Plumbing	☐ Fire suppression
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RESIDENTIAL BUILDINGS AND IMPROVEMENTS (for residential purposes only; check all that apply)

☐ New Building ☐ Single Family Dwelling ☐ Two Family Dwelling ☐ Basement (Walk Out) ☐ Basement (BG)	☐ Crawl Space ☐ Piers ☐ Slab on Grade ☐ Frost Free Foundation ☐ Accessory Building	☐ Attached Garage ☐ Detached Garage ☐ Pole Type Structure ☐ Carport ☐ Addition	☐ Alteration/Renovation/Repairs ☐ Demolition ☐ Manufactured Home ☐ Owner Occupied ☐ Rental Unit
Describe:			

STRUCTURE SIZES IN SQUARE FOOTAGE

☐ RESIDENTIAL ☐ COMMERCIAL

First Floor:	Basement:
Second Floor:	Garage:
Other Floor:	Additions:
Project cost - include materials and labor:	\$

PRE-MANUFACTURED/MOBILE HOME

☐ Manufactured home in a mobile home park				☐ Manufactured home on private property	
Type of Foundation:		☐ Concrete	☐ Block	☐ Wood	☐ Other
Type of Frame:		☐ Masonry Load Bearing	☐ Reinforced Concrete	☐ Wood Frame	☐ Structural Steel
Fire Suppression:		☐ Yes ☐ No	☐ Full ☐ Partial		
Classification of the Building:	Use Group:	Type of Construction:	Number of Stories:	Occupancy Load:	
Name of nearest body of water: (lake, river, stream)			How many feet is the project from the nearest body of water?		

APPLICANTS APPROVAL AND SIGNATURE SECTION

☐ THE APPLICANT IS RESPONSIBLE FOR THE PAYMENT OF ALL FEES AND CHARGES RELATING TO THIS APPLICATION AND MUST PROVIDE THE FOLLOWING INFORMATION:		
☐ ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE BUILDING CODE AND ALL PHASES OF THE CONSTRUCTION NEED AN INSPECTION WILL BE INSPECTED AND APPROVED BY A CLARE COUNTY BUILDING INSPECTOR BEFORE ANY FURTHER WORK IS STARTED. IF ANY ELECTRICAL, MECHANICAL OR PLUMBING WORK NEED TO BE DONE, I WILL MAKE SURE PROPER PERMITS WILL BE ACQUIRED AND ALL INSPECTIONS WILL BE COMPLETED AND WORK APPROVED BEFORE I CONTINUE WITH MY BUILDING PROJECT. I WILL COOPERATE WITH ALL CLARE COUNTY INSPECTORS AND ASSUME ALL RESPONSIBILITY TO ARRANGE FOR AND OBTAIN ALL NECESSARY INSPECTIONS.		
☐ I UNDERSTAND THAT I MUST KEEP MY PETS UNDER CONTROL WHILE THE INSPECTOR IS ON THE PREMISES. <u>Failure to control a pet shall result in rescheduling the inspection and the additional inspection will be charged at \$75.00.</u>		
☐ I UNDERSTAND THAT IF APPLICABLE THIS SITE MAY BE SUBJECT TO FEMA FLOODPLAIN REGULATIONS.		
☐ I UNDERSTAND THAT IT IS MY RESPONSIBILITY TO COLLECT AND INSURE APPROPRIATE LICENSING AND PROOF OF INSURANCE FOR ANY AND ALL TRADES WORKING ON MY BUILDING PROJECT. FAILURE TO DO SO MAY RESULT IN NO LEGAL RECOURSE IN THE EVENT OF CODE VIOLATIONS OR SUB STANDARD WORKMANSHIP.		
☐ I CERTIFY THAT I HAVE READ AND UNDERSTAND THIS APPLICATION IN FULL.		
* SECTION 23a OF THE STATE CONSTRUCTION ACT OF 1972, 1972 PA 230, MCL 125.1523a, PROHIBITS A PERSON FROM CONSPIRING TO CIRCUMVENT THE LICENSING REQUIREMENTS OF THIS STATE RELATING TO PERSONS WHO ARE TO PERFORM WORK ON A RESIDENTIAL BUILDING OR A RESIDENTIAL STRUCTURE. VIOLATORS OF SECTION 23a ARE SUBJECT TO CIVIL FINES.		
I HEREBY CERTIFY THAT THE PROPOSED WORK IS AUTHORIZED BY THE OWNER OF RECORD AND THAT I HAVE BEEN AUTHORIZED BY THE OWNER TO MAKE THIS APPLICATION AS HIS/HER AUTHORIZED AGENT, AND WE AGREE TO CONFORM TO ALL APPLICABLE LAWS OF THE STATE OF MICHIGAN. ALL INFORMATION SUBMITTED ON THIS APPLICATION IS ACCURATE TO THE BEST OF MY KNOWLEDGE.		
Signature of Owner:	Type or Print Name:	Date:
Signature of Owner's Agent:	Type or Print Name:	Date:

INTERNAL USE/INSPECTOR'S NOTES

THIS SECTION MUST BE COMPLETED FOR ALL NEW HOUSES, ADDITIONS AND ALTERATIONS

There are two ways to comply with the ENERGY CODE. Indicate what method has been used to provide documentation of code compliance.

1. ☐ Use the prescriptive method (see table 402.1.1)
2. ☐ Use the System Analysis method (see table 2).

TABLE 402.1.1

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT ^b U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE AND DEPTH	CRAWL SPACE WALL R-VALUE
5A	0.32	0.55	38	20 or 13 + 5'	13/17	30"	10/13	10, 2ft	15/19
6A	0.32	0.55	49	20 or 13 + 5'	15/20	30"	15/19	10, 4ft	15/19
7	0.32	0.55	49	20 or 13 + 5'	19/21	38"	15/19	10, 4ft	15/19

R-value of the insulation shall not be less than the R-values specified in the table.

b. The fenestration U-factor column excludes skylights.

c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" may be met with R-13 cavity insulation on the interior or the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs.

e. Or insulation sufficient to fill the framing cavity, R-19 minimum.

f. First value is cavity insulation, second is continuous insulation or insulated siding, so "13 + 5" means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40% or less of the exterior, continuous insulation R-value may be reduced by no more than R-3 in the locations where structural sheathing is used - to maintain a consistent total sheathing thickness.

g. The second R-value applies when more than half the insulation is on the interior of the mass wall.

TABLE 2 (SYSTEM ANALYSIS)

1. Michigan Uniform Energy Code—2009 (Detached 1 and 2 family dwellings)

2. Meeting the design, construction, and certification requirements under the U.S. EPA

ENERGY STAR HOMES PROGRAM

3. Meeting the design and construction guidelines for the **HOME ENERGY RATING SYSTEM (HERS)** with a minimum test score of 85.

4. Achieving an approval using the insulation requirements in **RES check** at <http://www.energycodes.gov/rescheck>

401.3 Certificate. A permanent certificate shall be posted on or in the electrical distribution panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of

fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

Signature:

Date:

Building Permit Application – Grid

Clare County Building Development

Please draw out your current structures as well as your new structures and mark them accordingly.

A large grid consisting of 20 columns and 30 rows of squares, intended for drawing structures. The grid is empty and occupies the majority of the page below the instructions.

Mandatory Blower Door Test

For all new construction

N1102.4.1.2 (R402.4.1.2) Testing (prescriptive). The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 4 air changes per hour. Testing shall be conducted with a blower door

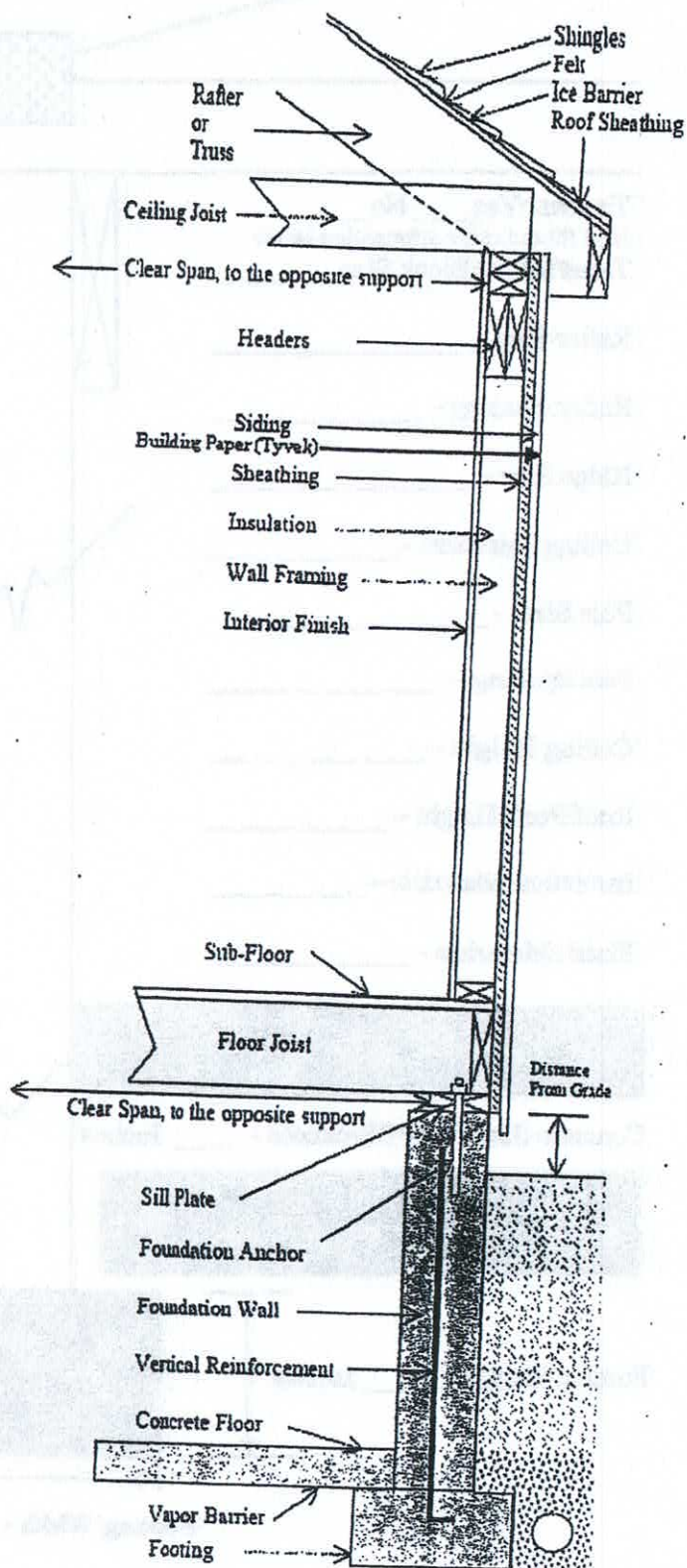
at a pressure of 0.2 inches w.g. (50 pascals). Where required by the code official, testing shall be conducted by a certified independent third party. Certification programs shall be approved by the state construction code commission. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures;
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Residential Frame Built (Roof, Walls, Floor, and Foundation)

APPENDIX A

Roof:
 Pitch - _____
 Shingles - _____
 Felt - _____
 Ice Barrier - _____
 Roof Sheathing - _____
 Truss - ☐ Yes ☐ No
 If No Answer The Following
 Rafter Size - _____
 Rafter Spacing - _____
 Rafter Clear Span - _____
 Rafter Species - _____
 Ridge - _____
 Ceiling Joist Size - _____
 Ceiling Joist Spacing - _____
 Ceiling Joist Species - _____
 Insulation - _____
 Roof Ventilation - _____
 Walls:
 Siding - _____
 Sheathing - _____
 Bldg. Paper (Tyvek) - _____
 Insulation - _____
 Walls Framing - _____
 Headers - _____
 Interior Finish - _____
 Ceiling Height - _____
 Floor:
 Sub-Floor - _____
 Floor Joist Size - _____
 Floor Joist Spacing - _____
 Floor Joist Clear Span - _____
 Floor Joist Species - _____
 Beam Type & Size - _____
 Distance From Grade - _____
 Foundation:
 Anchor Type - _____
 Anchor Spacing - _____
 Sill Plate - _____
 Poured Wall Size - _____
 Block Wall Size - _____
 Vertical Reinforcement - # _____ - _____ o.c.
 Concrete Floor Thickness - _____
 Vapor Barrier - _____
 Column Pad Size - _____ x _____ x _____
 Column Spacing - _____
 Footing Width - _____
 Footing Height - _____
 Footing Depth Below Grade - _____



Residential Pole Barn

Appendix C

The diagram illustrates the structural components of a residential pole barn. It shows a cross-section of the building with a gabled roof. Key components labeled include the roof covering, roof deck, carrier size, wall purlins, type of siding, building paper (Tyvek), skirt board size, and depth below grade. The diagram also shows the concrete slab floor thickness, footing height, and footing width. A note indicates that all concrete footings should be poured with clean water on a flat surface.

Roof Covering - _____

Roof Deck - _____

Carrier Size - _____

Wall Purlins - _____

Type of Siding - _____

Building Paper (Tyvek) - _____

Skirt Board Size - _____

Depth Below Grade - _____ Inches

Trusses: Yes _____ No _____
If no fill out rafter information below
Truss/Rafter Block Size _____

Rafter Size - _____

Rafter Spacing - _____

Ridge Size - _____

Ceiling Joist Size - _____

Pole Size - _____

Pole Spacing - _____

Ceiling Height - _____

Roof Peak Height - _____

Insulation Materials - _____

Finish Materials - _____

Concrete Slab Floor Thickness - _____ Inches

All concrete footings should be poured with clean water on a flat surface.

Footing Height - _____ Inches

Footing Width - _____ Inches



POLE BUILDING FOOTING SPECIFICATIONS

Clare County Community Development Department

225 W. Main St., Harrison, MI 48625 P.O. Box 438 • Office: 989.539.2761

Inspection Line: 989.539.2741 • Fax 989.539.7385 • www.clareco.net

"Our goal is to provide a safer place to live, work and play"

FOOTING SIZES FOR POLE BUILDINGS

THIS IS FOR 1500# PER SQUARE FOOT SOIL CAPACITY

WIDTH OF BUILDING	POLE SPACING FOR ONE STORY BUILDINGS						
	4 FEET	6 FEET	8 FEET	10 FEET	12 FEET	14 FEET	16 FEET
16 FEET	6"X12"	6"X12"	6"X14"	6"X14"	8"X16"	8"X18"	8"X18"
20 FEET	6"X12"	6"X12"	6"X14"	8"X16"	8"X18"	10"X20"	10"X20"
24 FEET	6"X12"	8"X16"	8"X16"	8"X18"	10"X20"	10"X22"	10"X22"
28 FEET	6"X12"	8"X16"	8"X18"	10"X20"	10"X22"	10"X22"	12"X24"
32 FEET	6"X12"	8"X16"	8"X18"	10"X20"	10"X22"	12"X24"	12"X26"
36 FEET	6"X12"	8"X18"	10"X20"	10"X22"	12"X24"	12"X26"	12"X28"
40 FEET	6"X14"	8"X18"	10"X20"	12"X24"	12"X26"	12"X28"	12"X28"
44 FEET	8"X16"	8"X18"	10"X22"	12"X24"	12"X26"	12"X28"	14"X30"
48 FEET	8"X16"	10"X20"	10"X22"	12"X26"	12"X28"	14"X30"	14"X32"
52 FEET	8"X16"	10"X20"	12"X24"	12"X26"	12"X28"	14"X30"	14"X32"
56 FEET	8"X18"	10"X22"	12"X24"	12"X28"	14"X30"	14"X32"	16"X34"
60 FEET	8"X18"	10"X22"	12"X26"	12"X28"	14"X30"	16"X34"	16"X36"
64 FEET	8"X18"	10"X22"	12"X26"	12"X28"	14"X32"	16"X34"	16"X36"

FOOTING CONCRETE

FOOTING SIZE	APPROXIMATE NUMBER OF REDI-MIX BAGS OF CONCRETE*		FOOTING SIZE	APPROXIMATE NUMBER OF REDI-MIX BAGS OF CONCRETE*	
	80# BAGS	50# BAGS		80# BAGS	50# BAGS
6"X12"	¾ BAG	1 BAG	12"X26"	5 ¾ BAGS	9 BAGS
6"X14"	1 BAG	1 ¼ BAGS	12"X28"	6 ½ BAGS	10 ½ BAGS
8"X16"	1 ½ BAGS	2 ¼ BAGS	14"X30"	8 ¾ BAGS	14 BAGS
8"X18"	2 BAGS	3 BAGS	14"X32"	10 BAGS	15 ½ BAGS
10"X20"	2 ¾ BAGS	4 ½ BAGS	16"X34"	12 ¾ BAGS	20 ½ BAGS
10"X22"	3 ½ BAGS	5 ½ BAGS	16"X36"	14 ¾ BAGS	23 BAGS
12"X24"	4 ¾ BAGS	7 ¾ BAGS	NOT USED		

*Above numbers are rounded to nearest ¼ bag. 1 ½ - 80 pound bags or 2 ½ - 50 pound bags equal approximately 1 cubic foot of mixed concrete based on information provided by QUIKRETE® Concrete Supply Company.

CARRIER SIZES FOR POLE BUILDINGS

THIS IS FOR SPRUCE-PINE-FIR #1 OR BETTER, DRESSED LUMBER

WIDTH OF BUILDING	POLE SPACING FOR ONE STORY BUILDINGS						
	4 FEET	6 FEET	8 FEET	10 FEET	12 FEET	14 FEET	16 FEET
16 FEET	2-2"x4"	2-2"x6"	2-2"x8"	2-2"x10"	A* 2-2"x12"	C* 3-2"x12"	C* 3-2"x12"
20 FEET	2-2"x6"	2-2"x8"	2-2"x8"	2-2"x10"	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"
24 FEET	2-2"x6"	2-2"x8"	2-2"x10"	2-2"x10"	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"
28 FEET	2-2"x8"	2-2"x10"	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"	MUST BE ENGINEERED	
32 FEET	2-2"x8"	A* 2-2"x12"	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"		
36 FEET	2-2"x8"	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"	4-2"x12"		
40 FEET	2-2"x10"	B* 3-2"x10"	C* 3-2"x12"	4-2"x12"			
44 FEET	2-2"x10"	B* 3-2"x10"	4-2"x10"	4-2"x12"			
48 FEET	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"				
52 FEET	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"				
56 FEET	A* 2-2"x12"	C* 3-2"x12"	4-2"x12"				
60 FEET	B* 3-2"x10"	4-2"x10"					
64 FEET	B* 3-2"x10"	4-2"x10"					

A*	3-2"X10" MAY BE USED INSTEAD OF 2-2"X12"	SPECIAL NOTE BUILDINGS WITH POSTS SPACED 8ft. ON CENTER AND A WALL HEIGHT BETWEEN 11ft. AND 14ft. MUST USE 6in. x 6in. POSTS.
B*	4-2"X8" MAY BE USED INSTEAD OF 3-2"X10"	
C*	4-2"X10" MAY BE USED INSTEAD OF 3-2"X12"	

EFFECTIVE DATE: 19 OCT 2023

