

### Roof loading data sheet

This form is to be completed and given to the building official with the application for plan review and building permit. The applicant shall give a copy of the completed form to the truss manufacturer.

Authority: 1972 PA 230	Jurisdiction information in this space		
	City	County	
	Muskegon	Muskegon	
Applicant's Name:			Date:
Applicant's Address:			Permit #
City:	State: MI	Zip Code:	
Applicant's signature:			
Jobsite location: Muskegon Charter Township			
Jobsite address:			
Township/ Village/ City of jobsite:			

Note: Where prescriptive design is used, the Ground Snow Load,  $P_g$ , from Table R301.2(1) shall be used as the design roof snow load except, where section R802.10.2.1 applies the design roof snow load shall be  $.7P_g$ . Additional unbalanced loads for drifting across the ridge are not required. Where engineered design is used, this form is to be completed by the permit applicant or design professional. The flat roof snow load,  $P_f$ , is defined as:  $P_f = .7P_g(C_e)(C_t)(I)$ . For factors  $C_e$ ,  $C_t$ , and  $I$ , place an "X" in the appropriate box below that best describes the structure and the particular jobsite and substitute the corresponding values in the formula above. The result is the flat roof snow load and is applied as the truss top chord live load,  $TCLL^1$ . All live loads and snow loads, including unbalanced loads and minimum loads, are to be applied per ASCE 7, chapters 4 and 7 and this code.

Ground Snow Load ( $P_g$ )= 60 From MRC Table R301.2(5)  $60 \times .7 \times C_e \times C_t \times I$

#### Exposure Factor ( $C_e$ )

Exposure		Fully Exposed (1)	Partially Exposed (2)	Sheltered (3)	
A	Large city center where at least 1/2 of the buildings exceed 70' in height	N/A	1.1	1.3	
B	Urban and suburban areas, wooded areas or other terrain with closely spaced objects having the size of single family dwellings or larger.	0.9	1.0	1.2	
C	Open terrain with scattered obstructions having heights less than 30' (flat, open country)	0.9	1	N/A	
D	Flat, unobstructed areas exposed to wind flowing over open water for a distance of at least 1 mile (i.e. Great Lakes)	0.8	0.9	N/A	

Mark only 1 of the 9 boxes under the Exposure Factor with an "X". Do not mark "X" in grayed out boxes

Note 1: **Fully exposed:** roofs exposed on all sides with no shelter by terrain, higher structures or trees

Note 2: **Partially exposed:** All roofs except those designed as "fully exposed" or "sheltered"

Note 3: **Sheltered:** Roofs located tightly among conifers that qualify as obstructions

#### Thermal Factor ( $C_t$ )

Thermal Condition ( conditions representative of anticipated conditions during the winter months for the life of the structure)	$C_t$
All structures except those listed below	1.0
Structures kept just above freezing and those with cold, ventilated roofs with an R factor of 25 or greater between the ventilated and heated spaces such as attics.	1.1
Unheated structures and those intentionally kept below freezing such as seasonal buildings or storage buildings	1.2
Continuously heated greenhouse with a roof R value less than 2 and having an interior temperature maintained at about 50 degrees F at 3' above the floor during winter months and a temperature alarm system or an attendant to warn of a heating failure.	0.85

Mark only 1 of the 4 boxes under the Thermal Factor with an "X"

#### Importance Factor (I)

Category	I
I Buildings and other structures representing low hazard to human life, i.e. agricultural, temporary and minor storage facilities	0.8
II All buildings except those listed as categories I, III and IV	1.0
III Buildings and other structures representing substantial hazard to human life in the event of failure	1.1
IV Buildings and other structures designated as essential facilities by the design professional	1.2

Mark only 1 of the 4 boxes under the Importance Factor with an "X"

Notes for additional Drift surcharge, attic or storage loading: All roof trusses have additional live (storage) loads applied to the bottom chord where required per Table R301.5. Use the space below to address special loads required for this specific construction project as noted by the design professional. You may have two Thermal factor adjustments due to an unheated garage or sunroom.