

POW PETERMAN

Consulting Engineers



May 19, 2011

Reference: 11-05-0044

TR Standards
96 Rankin Street, Unit F
Waterloo ON N2V 2B6

ATT: RAY WALTERS

Dear Sir:

RE: GROUND MOUNTED FOUNDATIONS FOR MOBILE HOMES

Further to your request, the following paragraphs will outline our assessment of foundations/pads/piers placed on grade for recreational vehicles and trailers. The concern is for frost heave and uplift from wind action.

The Ontario Building Code addresses this issue in Part 9, Sections 9.1.1.9 “Site Assembled and Factory Buildings”, 9.12.2.2 “Minimum Depth of Foundation” and 9.15.1.3 “Foundations for Deformation Resistant Buildings”. Section 9.12.2.2 (6) indicates that the foundation depths do not apply to mobile homes that are constructed to CAN/CSA Z240.2.1 “Structural Requirements for Mobile Homes”. Assuming that the mobile home under consideration has been constructed to this Standard, then Section 9.15.1.3 would govern the founding requirements.

Section 9.15.1.3 indicates that the foundation must comply with CSA Z240.10.1 “Site Preparation, Foundation and Anchorage of Mobile Homes”. Founding above frost penetration depth is permitted by Section 6.3.2 of Z240 if the “superstructure will not be damaged by differential soil movement caused by frost action.” If the home is designed to CAN/CSA Z240.2.1, then grade level founding is permitted.

Tie downs and the locations of supports are covered by the Z240 Standard. The historical approach to founding mobile homes involves the use of concrete blocks on patio stones. The TRS support provides the same if not improved function. Any damage to the mobile home by differential movement will likely be inflicted by the hoisting, transportation and installation on site. Absent extraordinary conditions, differential movement due to frost heave will not approach the differential movements from handling and transportation.

Should you require further discussion, please do not hesitate to contact our office.

Yours truly,
POW PETERMAN
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R.D. Peterman M.A Sc., P. Eng.
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