MANUFACTURED HOMES
(CAN/CSA-A277 and CAN/CSA-Z240 MH)

DISCUSSION:

This STANDATA has been developed to provide an insight into how the CSA Standards on manufactured homes fit in with the ABC 1997. The difference between the two CSA standards dealing with manufactured homes, one of which is a construction standard and the other a plant certification standard are dealt with.

In Alberta all site or plant built homes must meet the requirements of the ABC 1997. The ABC 1997 requires that off-site manufactured housing be constructed under third party certification as follows:

2.6.5.2. Third Party Certification
   1) Every manufactured home and off-site manufactured house that is constructed after June 1, 1998, shall be certified, by the Canadian Standards Association, or an organization approved for this purpose by the Director, to confirm that the unit complies with the performance required by this Code.

As part of the certification process, CSA may certify to standards that are in addition to the requirements of the Alberta Building Code 1997. Therefore, manufactured homes may also be constructed using either the CAN/CSA-A277 or the CAN/CSA-Z240 MH series of standards.

The CAN/CSA-A277 standard covers the procedure for certification of factory-built houses, including modular, panelized, and mobile homes. In this case the Alberta Building Code 1997 would be the document referenced in regard to building code requirements, as the A277 does not include specific construction requirements similar to Part 9 of the ABC.
The CAN/CSA-Z240 MH series of standards do provide building construction requirements, however in Alberta, the Alberta Building Code 1997 is required to be met and CSA uses it as the minimum set of building requirements. One area that has been of major concern is the requirements in regard to foundations for manufactured homes.

The foundation requirements for a manufactured home are the same as that for a site built home unless it complies with Sentence 9.15.1.4.(1) of the Alberta Building Code 1997.

9.15.1.4. Foundations for Deformation Resistant Buildings

1) Where the superstructure of a detached building conforms to the requirements of the deformation resistance test in CAN/CSA-Z240.2.1., "Structural Requirements for Mobile Homes," the foundation is permitted to be constructed in conformance with CSA Z240.10.1. "Site Preparation, Foundation and Anchorage of Mobile Homes."

Foundations constructed in conformance with CAN/CSA-Z240.10.1. can be used for manufactured homes (CAN/CSA-A277 and CAN/CSA-Z240) provided the superstructure of the homes satisfy the criteria of deformation resistance test in conformance with CAN/CSA-Z240.2.1.

Part 9 is prescriptive for traditional foundation walls on concrete strip footings. Foundations that are not prescriptively listed in Part 9 of the Alberta Building Code 1997 such as preserved wood, grade beams/piles or screw piles must be designed under Part 4 and the design/site review must be performed by a Registered Architect or Professional Engineer licensed to practice in Alberta.

Alberta Building Code 1997:

4.1.1.2. Definitions
2) For design carried out within this Part, the designer shall be a professional engineer or registered architect licensed to practice in the Province of Alberta skilled in the work concerned. (See Appendix A.)

A-4.1.1.2.(2) Structural Designer. Part 4 has been written on the assumption that structural design will be carried out by a professional who is qualified for such design. Sentence 4.1.1.2.(2) is not intended to imply that a professional may not also be required in the application of requirements in other Parts of the ABC.