[0009] (2). Position two - - a vertical side wall test - - a test of load applied directly downward onto the vertical side wall.

[0010] (3). Position three - - a cover test - - a test showing how an enclosure responds to a load applied directly to the center of the cover.

[0011] The present invention provides an enhanced strength grade level utilities enclosure that can be made from lighter weight polymeric materials. In one embodiment, the enclosure's design provides enhanced structural loading capacity in excess of ANSI Tier 15 vertical side wall load and center cover vertical load requirements.

[0012] The ANSI Tier 15 test standards are one example of various industry test standards for grade level enclosures for which the present invention provides enhanced load capacities. Structural improvements, in particular, are demonstrated for enclosures' vertical side wall load capacities; and these improvements would result for different types of enclosures each having their own separate vertical side wall load capacity requirements.

SUMMARY OF THE INVENTION

[0012a] According to a first aspect of the present invention, there is provided an enhanced strength grade level utility enclosure for underground utilities connections, comprising: a substantially vertical wall structure extending continuously around an open interior region within the wall structure, the wall structure made of a molded polymeric material; the vertical wall structure having an upper edge extending around an opening to the interior of the enclosure and a bottom edge on which the enclosure is supported; a removable cover plate adapted for mounting to an opening in the grade level enclosure to close off at least a portion of the interior region from the environment, the cover plate adapted to engage at least a portion of the enclosure's upper edge structure; the vertical wall structure including an upright inner wall panel extending from the upper edge to the bottom edge of the vertical wall structure, the inner wall panel having an upright inside face spanning the interior of the enclosure; the inside face of the inner wall panel having left and right sides opposing one another; one or more narrow, vertically extending slotted regions recessed in the inside face of the inner wall panel on the left side and on the right side of the enclosure; and an upright rigid support bar optionally adapted for use as a cable rack positioned in at least one slotted region on each side of the wall structure's inside face; the support bars providing substantially continuous rigid vertical support extending from the upper edge to the bottom edge of the enclosure's vertical wall structure.

[0012b] According to a second aspect of the present invention, there is provided an enhanced strength grade level utility enclosure for underground utilities connections, comprising: a substantially vertical wall structure extending continuously around an open interior region within the wall structure, the wall structure having an open bottom and made of a molded polymeric material; the vertical wall structure having upper edge extending around an opening to the interior of the enclosure and a bottom edge on which the enclosure is supported;

the vertical wall structure including an upright inner wall panel extending from the upper edge to the bottom edge of the vertical wall structure, the inner wall panel having an upright inside face spanning the interior of the enclosure; the inside face of the inner wall panel having left and right sides opposing one another; longitudinally spaced apart, vertically extending slotted regions recessed in the inside face of the inner wall panel on the left side and on the right side of the enclosure; and an upright rigid support bar adapted for positioning in separate slotted regions on each side of the wall structure's inside face; in which positioning of the support bars in the recessed slotted regions provides substantially continuous rigid vertical support extending from the upper edge to the bottom edge of the enclosure's vertical wall structure.

[0013] ~~Briefly, one embodiment of this invention comprises an enhanced strength grade level utility enclosure which includes a vertical wall structure made of a molded polymeric material. The vertical wall structure has an upright inner wall extending from the upper edge to the bottom of the vertical wall structure. The inner wall faces the interior of the enclosure. One or more narrow, vertically extending slotted regions are recessed in the inside face of the inner wall. Upright rigid support bars, adapted for use as cable racks, are positioned in separate slotted regions formed on the inside face of the wall structure. The support bars provide a substantially continuous means of rigid vertical load support extending from the upper edge down to the bottom edge of the enclosure's vertical wall structure.~~ The recessed support bars in combination with the vertical wall structure may provide enhanced wall load strength sufficient for exceeding vertical side wall load test standards, among other test standards, for grade level enclosures.

[0014] These and other aspects of the invention will be more fully understood by referring to the following detailed description and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] Fig. 1 is a perspective view showing one embodiment of an enhanced strength grade level utilities enclosure according to principles of this invention.

[0016] Fig. 1A is a perspective view showing another embodiment of the utilities enclosure.

[0017] Fig. 2 is an enlarged fragmentary perspective view showing the construction of a prior art grade level utilities enclosure.