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Loads Exerted by Irish Potatoes in Shallow Bulk Storage Structures

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1 Purpose and scope

1.1 This practice provides guidelines from which designers may calculate loads on vertical and inclined walls, partitions, bin fronts, ducts, and appurtenances that are to resist lateral pressure of potatoes stored in bulk. These guidelines may be modified for specific, unique load conditions.

1.2 This practice is for bins that are wider than deep (B > H) and not deeper than 5.5 m (18 ft) (see Figure 1 for explanation of symbols).

1.3 This practice is for bins in which length (L) is greater than width (B).

1.4 This practice applies to maximum potato pressures measured in full-sized bins. These occurred with wet potatoes.

1.5 Other types of structural loads are listed in the following standards: ASAE EP475, ASAE EP378.3, ASAE EP538 and ASAE EP545.