

## QUESTION WE'VE BEEN ASKED QB 15/12

### DEPRECIATION TREATMENT FOR "BUILDINGS WITH PREFABRICATED STRESSED-SKIN INSULATION PANELS"

All legislative references are to the Income Tax Act 2007 unless otherwise stated.

This **Question We've Been Asked** provides guidance for both taxpayers and Inland Revenue staff on which buildings the Commissioner considers come within the asset class "Buildings with prefabricated stressed-skin insulation panels" in the "Buildings and Structures" asset category in the Commissioner's Table of Depreciation Rates.

#### Question

1. What buildings come within the asset class "Buildings with prefabricated stressed-skin insulation panels"?

#### Answer

2. The asset class "Buildings with prefabricated stressed-skin insulation panels" (also known as "sandwich panels") includes buildings<sup>1</sup> where:
  - the sandwich panels form a core part of the structural framework of the building (meaning the building is constructed solely of interlocking sandwich panels without a steel frame construction); or
  - the structural framework of the building is steel and:
    - can be categorised as a shade-roof structure (being one where the sheet metal cladding of the warehouse provides shade and weather proofing to the insulation); or
    - the exterior cladding is predominantly made using sandwich panels (ie, no less than 75% of the external cladding).
3. Examples of buildings that potentially fall within this asset class are coolstores, abattoirs or meat processing facilities, and fish processing facilities.

#### Background

4. The "Buildings with prefabricated stressed-skin insulation panels" asset class appears in the "Building and Structures" asset category in the *Commissioner's Table of Depreciation Rates* ("Depreciation Table") and has a depreciation rate of 4.5% diminishing value (DV) or 3% straight line value, based on an estimated useful life (EUL) of 33.3 years.
5. A prefabricated stressed-skin insulation panel comprises a foam core **sandwiched between two "skins"**. The core is most commonly made from polyurethane or styrene foam and is both durable and light weight. The "skin" is most commonly made from stainless steel, aluminium or plain galvanised steel. **These are often referred to as "sandwich panels"**.
6. There has been some debate on what type of building comes within the asset class. In particular, whether buildings that are only partially built using insulation panels come within the asset class.

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<sup>1</sup> For the meaning of the term "building" in the context of the depreciation provisions, please refer to Interpretation Statement IS 10/02: "Meaning of 'building' in the depreciation provisions" (*Tax Information Bulletin* Vol 22, No 5 (June 2010): 24).

## Buildings “with” prefabricated stressed-skin insulation panels

7. Under the asset category “Buildings and Structures” in the Depreciation Table is an asset class “Buildings with prefabricated stressed-skin insulation panels”.
8. The *Concise Oxford English Dictionary* defines “with” as “accompanied by, in the same direction, or possession; having, or the material used for a purpose”.<sup>2</sup> Therefore, applying the dictionary definition of “with”, the building should either be accompanied by prefabricated stressed-skin insulation panels or it must be constructed by means of prefabricated stressed-skin panels.
9. The building asset classes for depreciation purposes are described either by the structural/construction method used or by the activity the structure houses. The asset class “with prefabricated stressed-skin insulation panels” is a reference to an element of the construction, rather than to an activity that is being carried on within the structure.<sup>3</sup> Therefore, the Commissioner considers that “with” prefabricated stressed-skin insulation panels refers to a building being constructed “by means of” these panels.

## Framing structure and cladding

10. In the asset categories contained in Determination DEP 1: Tax Depreciation Rates General Determination Number 1 (DEP 1), there are two further distinctions in the building asset class descriptions: those that describe the framing structure (for example, buildings with steel or timber and steel framing or buildings with reinforced concrete framing), and those that refer to the cladding (for example, shade-houses glass, shade-houses PVC).
11. The Commissioner’s view is that the prefabricated stressed-skin insulation panels asset class could include **either the building’s cladding or** the framing structure.

## *Buildings made from mixed cladding materials*

12. In some instances the exterior cladding of a building may be constructed from mixed materials. For example, a coolstore, where part of the building is made from sandwich panels and part of the building, housing a small administration room, is built from concrete blocks. Alternatively, a building that has steel framing and concrete walls may have a small coolstore facility made of sandwich panels as part of the building.
13. Where the exterior cladding of a building is made from mixed construction materials, the Commissioner will take into account the overall percentage of the different materials used. If, overall, 75% or more of the exterior cladding/external walls of the building is made from sandwich panels, the Commissioner considers that the building comes within the prefabricated stressed-skin insulation building asset class.

## Example: Coolstores

14. Since the 1970s, the use of structural sandwich panels has been a cost-efficient construction method for coolstores where hygienic food storage is required.
15. Coolstores operate from 0°C to 10°C and are used to hold product at temperatures in this range. The form that a coolstore takes is determined by the storage regulations, and handling, hygiene and client requirements. The

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<sup>2</sup> *Concise Oxford English Dictionary*, Oxford University Press 2006.

<sup>3</sup> Other building asset classes refer to activities they house, for example, chemical works, fertiliser buildings, etc.

predominant type of coolstore built in New Zealand since the late 1960s has been a single-storey, rectangular shaped building, generally with a maximum storage height of approximately 7.6 metres.<sup>4</sup>

16. Steel is the predominant material used in the framing of coolstore structures due to its economy and resilience in low temperature environments. Typically, a coolstore building was constructed as a weather enclosure and the insulated coolstore created by lining the inside of the warehouse with sandwich panels to **form an insulated "box"**. These are known as shade-roof structures, where the sheet metal cladding of the warehouse provides a shade and weather roof to the insulation.
17. As manufacturing techniques and sandwich panel quality improved, sandwich panels were increasingly used as unprotected cladding against external weather environments. In these circumstances, the insulated panels were increasingly used as a structural element, weather cladding and insulation.
18. When the Depreciation Table was introduced in 1993, the predominant form of coolstore was the shade roof structure lined with insulation panels. However, as manufacturing techniques have evolved and sandwich panels have improved, the need for sheet metal cladding has been reduced to the extent that the exterior cladding and roof of coolstores are now constructed predominantly of sandwich panels.

### **Changing a depreciation rate**

19. In limited circumstances a taxpayer can change the depreciation rate that they use to depreciate an item of depreciable property. For example, where the taxpayer has been using an incorrect rate.
20. For further guidance on changing to a different depreciation rate please refer to QB 15/03: *Income tax – changing to a different depreciation rate for an item of depreciable property* (*Tax Information Bulletin* Vol 27, No 4 (May 2015): 30).

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<sup>4</sup> IPENZ Practice Note 15 – Coldstore Engineering in New Zealand at [4] and [7]