# CHAPTER 1 - MATERIALS AND RESOURCES

700

## 701.08 COMPOSITE WOOD PRODUCTS

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### INTENT

**Reduce the use of formaldehyde in building products thereby improving the occupants' comfort, health and well-being.**

### REQUIREMENT

For all new buildings, the composite wood products that are used in the interior of the building, the added urea-formaldehyde resins must be within the accepted percentage as prescribed by Dubai Municipality.

### SIGNIFICANCE

Formaldehyde is a naturally occurring volatile organic compound (VOC). Formaldehyde is a colourless, flammable and strong smelling chemical used in construction products such as adhesives and resins. The effects of exposure to high levels of formaldehyde include eye, nose and throat irritation, wheezing and coughing, skin rash or severe allergic reactions. Formaldehyde is also considered to be carcinogenic.

Most significant sources of formaldehyde in a building are composite wood or agrifiber products manufactured using urea formaldehyde resin adhesives. At room temperatures, these products react and may emit gaseous formaldehyde. High levels of VOC affect the building occupants and those who install or apply these products during construction. Reducing the use of formaldehyde in composite wood products used in buildings will improve indoor air quality and will have a positive effect on building occupants' comfort, health and well-being.

### APPLICABILITY

This regulation is applicable to all building types. Refer to Table 101.07(1) in Section One - Administration for detailed applicability levels.

### IMPLEMENTATION

A composite wood product is defined as a product consisting of wood and plant particles or fibres bonded together by a synthetic or resin. Composite wood includes products such as plywood, particle board, composite door cores, oriented strand board (OSB) medium density fibreboard (MDF) etc. Urea-formaldehyde is a combination of urea and formaldehyde present in some types of adhesives, which may emit formaldehyde at room temperature.