

Materials and Resources

701.01 Thermal and Acoustical Insulation Materials

For all new buildings, insulation materials that are installed in the building must:

1. Be manufactured without the use of Chlorofluorocarbons (CFCs).
2. Be non-toxic and does not release toxic fumes during combustion.
3. Have 0.05 ppm or less of added formaldehyde.
4. Have a Threshold Limit Value (TLV) of 0.1 or less of Individual Volatile Organic Compounds.
5. Be fire resistant as per the requirements set forth by Dubai Civil Defence.
6. Thermal Insulation Materials should be certified by Dubai Central Laboratory.
7. Achieve all the requirements set forth by Dubai Municipality.

All thermal and acoustical insulation must be installed as per the manufacturer's instructions and must be approved by Dubai Municipality.

701.02 Certified / Accredited Timber

For all new buildings, at least 25% by volume of timber and timber-based products used during construction and permanently installed in the building must be from a certified / accredited source, approved by Dubai Municipality.

701.03 Asbestos Containing Materials

For all new buildings and for the maintenance, addition or alteration of existing buildings, asbestos containing materials must not be used.

701.04 Lead or Heavy Metals Containing Materials

For all new buildings and for the maintenance, addition or alteration of existing buildings, paints or other materials that may contain percentage of lead or other heavy metals that is more than the prescribed limits set by Dubai Municipality, must not be used, unless the metal is encapsulated in systems such as a photovoltaic cell.

All paints and materials containing lead or other heavy metals must be accredited / certified from Dubai Central Laboratory or any source approved by Dubai Municipality.

701.05 Ozone Depletion Potential (ODP) Material Management:

For all new buildings:

- A. Installations of heating, ventilation, and air conditioning (HVAC) and refrigeration equipment must contain refrigerants with zero ozone depletion potential (ODP) or with global warming potential (GWP) less than 100, unless the equipment contains less than 0.23 kg of refrigerant.
- B. Fire suppression systems must not contain any ozone-depleting substances (Chlorofluorocarbons [CFCs], Hydrochlorofluorocarbons [HCFCs] or Halons).

For existing equipment:

- A. CFC and halon-based materials are not to be used for any purposes.
- B. From 1 January 2030, HCFC based materials or any other material having any ODP are not to be used for any purposes.
- C. The venting or direct discharging of any refrigerants during equipment maintenance is strictly prohibited.
- D. Recovery, reclamation, recycling and reuse of refrigerants must be practiced at all times.

701.06 Recycled Content

For all new buildings, of the total materials used in the construction of the building, the following percentage of recycled content must be met:

- 5% for Silver Sa'fa
- 10% for Golden Sa'fa
- 15% for Platinum Sa'fa

701.07 Regional Materials

For all new buildings, of the total materials used in the construction of the building, the following percentage of materials must be procured regionally:

- 5% for Silver Sa'fa
- 10% for Golden Sa'fa
- 15% for Platinum Sa'fa

701.08 Composite Wood Products

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.

Waste Management

702.01 Construction and Demolition Waste

For all new buildings except buildings in CBD area, at least 50% by volume or weight of waste material generated during the construction and/or demolition of buildings must be diverted from disposal in landfills. Diverted materials must be recycled or reused.

This shall be implemented as follows:

1. Concrete waste must be diverted to Construction Waste Treatment Plant.
2. Other recyclable materials such as woods, plastics and metals can be re-used at site.
3. Excavated soil, land-clearing debris and hazardous waste must be diverted to places designated by the concerned departments of Dubai Municipality (these materials are exempt while calculating the percentages for recycling or reuse).