

Hazard classification decision tree (EN 12845 and NFPA 13)

method

Practical decision tree to choose the right hazard class — Light, Ordinary, High Hazard Process, or Storage.

Step 1 — Is there storage?

If storage > 4 m or rack storage is present, you are in storage occupancies. EN: HHS1–HHS4 based on ST1–ST4. NFPA: Chapters 20–25 by commodity class. Skip to storage decision tree.

Step 2 — Is it a process risk?

If processes involve flammable liquids, plastics processing, paint spray, or similar — HHP1–HHP4 (EN) or Extra Hazard Groups 1–2 (NFPA).

Step 3 — Otherwise it's Ordinary or Light

Schools (non-storage), hospitals, libraries = LH (EN) / Light (NFPA). Offices, hotels = OH1 / Light. Shops, restaurants = OH2 / Ordinary 1. Workshops = OH3 / Ordinary 2.

Pitfalls

1) Mezzanines used for storage push an OH room into HHS. 2) A retail floor with pallet displays can shift from OH2 to HHS. 3) Server rooms with cardboard packing waste behave more like HHP than LH.

Source: EN 12845:2015 Annex A–C; NFPA 13 (2022) Chapters 4 and 20