

5.6.1 Light Hazard Occupancies [see 5.2.2]

Places of worship having assembly (like temples, churches), educational institutions, hospitals (excluding kitchens, stores, utilities), hotels (excluding kitchens, stores, utilities), libraries, museums, nursing homes, office buildings (excluding store rooms), prisons, residential and apartments [see 5.2.2 and 11.8.2.7].

5.6.2 Ordinary Hazard Occupancies [see 5.3.2]

Such occupancies apart from others, also includes manufacturing units as listed below:

1. Abattoirs
2. Abrasive wheel and powder
3. Aircraft factories (excluding hangers)
4. Airport terminal buildings
5. Bakeries
6. Biscuit factories
7. Book-binders and publishers
8. Breweries
9. Boot and shoe units
10. Cables
11. Candles
12. Cardboard factories
13. Carpentry and furniture [not involving foam/foam plastics]
14. Carpets
15. Car parking areas within building or basement
16. Cement factories
17. Ceramics factories
18. Chemicals
19. Cinematographic and TV production broadcasting studios
20. Cloth processors
21. Confectioneries
22. Dairies
23. Dehydrated vegetable factories
24. Departmental stores/retail shops
25. Electronic equipment and assembly
26. Engineering workshops
27. Fibreboard factories
28. Flax, jute and hemp mills
29. Flour mills
30. Food and beverages
31. Glass factories
32. Hosiery and garment
33. Jewellery
34. Laboratories
35. Metro stations and associated occupancies within there of
36. Motor garages
37. Paint shops
38. Paper mills
39. Photographic film factories
40. Plywood factories
41. Printing presses
42. Restaurants and cafes
43. Rope factories
44. Rubber and plastics (other than foam plastics)
45. Shopping malls and multiplex occupancies
46. Soap factories
47. Sugar mills
48. Synthetic fibres/yarn factories
49. Tanneries
50. Textile mills
51. Timber and wood-working (except saw mills)
52. Theatres
53. Tobacco factories
54. Wood wool
55. Woolen mills
56. Vermicelli
57. Wax factories

5.6.3 High Hazard Occupancies

Occupancies housing or manufacturing (as the case may be) the following:

1. Aircraft hangers
2. Bitumen and wax coated paper
3. Celluloid goods cellulose nitrate
4. Cigarette filter
5. Distilleries
6. Duplicating/stencil paper explosives
7. Fire works
8. Floor cloth and linoleum
9. Foam plastics and foam rubber
10. Hessian cloth/tar felt
11. Match factories
12. Oil mills
13. Paint, colour and varnish factories
14. Resin, rosin, turpentine and lamp black
15. Rubber substitutes making units
16. Saw mills
17. Surgical cotton, mattress and pillow makers
18. Tar distillation units
19. Wood wool manufacturers

5.7 Storage Occupancies

Storage risks (stacked, high-piled or racked) are categorized under four classes as per classifications

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below. The list is not very exhaustive; and for materials other than what is stated, specialist literature may be referred.

a) Category-I

1. Adhesive (non-flammable)
2. Alcohol \leq 20 percent by volume in glass or plastic bottles
3. Beer
4. Bottles – Glass and plastic containing non-flammable liquids
5. Cement – bagged
6. Ceramics
7. Coffee – packaged, cartoned
8. Crockery
9. Electrical and mechanical appliances – Metallic
10. Fertilizers – Phosphate based
11. Foods, tinned in cardboard boxes and trays
12. Foods, tinned wrapped in unexpanded plastic film
13. Footwear other than plastic
14. Glass fibre
15. Glassware
16. Grain in sacks
17. Groceries
18. Hardware items
19. Meat-chilled or frozen
20. Metal goods
21. Paints water based
22. Paper sheets stored horizontally
23. Wine

b) Category-II

1. Alcohol $>$ 20 percent by volume in glass bottles
2. Asphalt paper in horizontal rolls
3. Batteries, dry cell
4. Batteries, wet cell
5. Beer containers in plastic or wooden crates
6. Books
7. Cardboard (all types) – Stored flat
8. Cardboard, except corrugated rolls stored horizontally
9. Cardboard cartons – Empty light weight boxes
10. Carpets without foam backing

11. Cartons, waxed (flats)
12. Cellulose baled (not cellulose nitrate or cellulose acetate)
13. Cellulose pulp
14. Cereals boxed
15. Charcoal excluding impregnated charcoal
16. Cheese – packaged, cartoned
17. Chewing gum – packaged, cartoned
18. Chocolates – packaged, cartoned
19. Cloth, wool or cotton
20. Cocoa products – packaged, cartoned
21. Coconut matting
22. Cork and cork-baled
23. Cotton – baled
24. Electrical cable or wire
25. Fertilizer – nitrate based
26. Fibreboard
27. Flammable liquids in non-combustible containers
28. Flax
29. Flour in sacks or paper bags
30. Foodstuffs (in sacks, frozen, packaged)
31. Footwear – plastic
32. Furniture, upholstered with natural fibres and materials but excluding plastics
33. Furniture, wooden
34. Furs – flat in boxes
35. Grain In sacks
36. Hemp
37. Hides
38. Jute
39. Knitware
40. Laminated board
41. Leather goods
42. Linen
43. Mattresses other than expanded plastic
44. Milk powder in bags or sacks
45. Pallets, plastic or wood
46. Paper (sheets stored vertically)
47. Paper (like newspaper), rolls stored horizontally
48. Paper, pulp – Rolled or baled
49. Paper waste – Baled
50. Pharmaceuticals – Glass bottles

51. Photographic films
 52. Plastics (non-foamed, other than cellulose nitrate)
 53. Pillows feathers or down
 54. Rags loose or baled
 55. Roof felt in rolls horizontal storage
 56. Rope – natural or synthetic fibre
 57. Soap, water soluble
 58. Spiritous liquors cased glass bottles
 59. String – natural or synthetic fibre
 60. Sugar in bags or sacks
 61. Textiles
 62. Timber, sawn (not in ventilated stacks)
 63. Timber, unsawn
 64. Tobacco – Leaf and finished goods
 65. Vegetable fibres – hay, straw, hemp, cotton, etc
 66. Wood
 67. Wood, chipboard, plywood stored flat, not in ventilated stacks
 68. Wood pulp Baled
- c) Category – III
1. Adhesive (flammable)
 2. Alcohol > 20 percent by volume in plastic bottles
 3. Asphalt paper in vertical rolls
 4. Butter – Whipped and spread
 5. Candles
 6. Candy – packaged and cartoned
 7. Canvas, tar impregnated
 8. Carbon black
 9. Cardboard, except corrugated rolls stored vertically
 10. Cardboard, corrugated rolls stored horizontally
 11. Cardboard cartons empty heavy weight made up boxes
 12. Carpet tiles
 13. Carpets with foam backing
 14. Cartons, waxed (made up)
 15. Cloth, synthetic
 16. Electrical and mechanical appliances – other than metallic
 17. Esparto – loose or baled
 18. Fibreglass insulation
19. Firelighters
 20. Flammable liquids in combustible containers
 21. Linoleum
 22. Matches
 23. Paper tissue rolls horizontally stored
 24. Paper (like newspaper), rolls stored vertically
 25. Paper, bitumen and wax coated
 26. Paper, waste
 27. Pharmaceuticals – plastic bottles
 28. Photographic paper
 29. Plastic furniture
 30. Plastic materials other than what is stated in
 31. Category-II and expanded-polyurethane and polystyrene
 32. Resins excluding flammable liquids
 33. Roof felt in rolls vertical storage
 34. Rubber goods including tyres and tubes
 35. Timber, sawn (in ventilated stacks)
 36. Wicker work
 37. Wood veneer sheets
- d) Category-IV
1. Ammunitions
 2. Cardboard, corrugated (in rolls stored vertically)
 3. Diapers
 4. Expanded polystyrene packagings
 5. Foamed rubber
 6. Foamed upholstery
 7. Liquor bottles other than beer
 8. Paints – Oil based and Nail polish
 9. Paper tissue rolls vertically stored
 10. Tyres, stored horizontally
 11. Wax, paraffin
 12. Wood veneer sheets
 13. Wood wool baled

6 PLANNING STAGE

6.1 Initial Considerations

6.1.1 Consultation

Where a sprinkler system or an extension or alteration to a sprinkler system is being considered for new or existing building, the authorities concerned shall be consulted at an early stage: