

E04 BUILDING (layered materials, layered products in general B32B)**E04F FINISHING WORK ON BUILDINGS, E.G. STAIRS, FLOORS** (windows, doors E06B)

SUNSHADES, AWNINGS.....	10/00	DUCTS OR CHANNELS.....	17/00
STAIRWAYS.....	11/00	IMPLEMENTS.....	21/00
COVERING OR FINISHING WALLS, CEILINGS, OR FLOORS.....	13/00, 15/00, 19/00	OTHER FINISHING DETAILS	19/00

10/00	Sunshades; Awnings (baldachins A45B, A45F, E04H; trailer awnings E04H 15/08; for tents E04H 15/58)	13/00	Coverings or linings, e.g. for walls or ceilings (flooring E04F 15/00; decoration of surfaces, mosaic work B44, e.g. paper-hanging B44C 7/00; made of webs, e.g. of fabrics or wallpaper, D03D, D04G, D04H, D06N, D21H; construction of ceilings E04B 9/00; roofings or similar water-tight coverings against precipitation E04D) [3]
10/02	. of flexible canopy materials, e.g. canvas	13/02	. of plastic materials hardening after applying, e.g. plaster (surface treatment in painting technique B44D; inorganic or bituminous masses C04B; organic plastics C08L)
10/04	. . with material fixed on sections of a collapsible frame	13/04	. . Bases for plaster (sub-ceilings with plaster-carrying means E04B 9/06)
10/06	. . comprising a roller-blind with means for holding the end away from a building	13/06	. . . Edge-protecting borders
10/08	. of a plurality of similar rigid parts, e.g. slabs, lamellae (rigidly-arranged sunshade roofs with coherent surfaces E04B 7/00)	13/07	. composed of covering or lining elements; Sub-structures therefor; Fastening means therefor [8]
10/10	. . collapsible	13/072	. . composed of specially adapted, structured or shaped covering or lining elements [8]
11/00	Stairways, ramps, or like structures (mounting or marking-off stairways E04F 21/26; of temporary construction E04G 27/00); Balustrades; Handrails (ladders permanently attached to fixed structures E06C 9/00)	13/073	. . . for particular building parts, e.g. corners or columns [8]
11/02	. Stairways; Layouts thereof	13/074	. . . for accommodating service installations or utility lines, e.g. heating conduits, electrical lines, lighting devices or service outlets [8]
11/022	. . characterised by the supporting structure [6]	13/075	. . . for insulation or surface protection, e.g. against noise or impact [8]
11/025	. . . Stairways having stringers [6]	13/076	. . . characterised by the joints between neighbouring elements, e.g. with joint fillings or with tongue and groove connections [8]
11/028	 having a central stringer [6]	13/077	. . . composed of several layers, e.g. sandwich panels (E04F 13/075 takes precedence) [8]
11/032	. . . Spiral stairways supported by a central column [6]	13/078	. . . Stretched foil- or web-like elements attached with edge gripping devices [8]
11/035	. . . Stairways consisting of a plurality of assembled modular parts without further support [6]	13/08	. . composed of a plurality of similar covering or lining elements (E04F 13/072 takes precedence; borders, skirtings E04F 19/02) [1,8]
11/038	 each modular part having a load-bearing balustrade part [6]	13/09	. . . of elements attached to a common web, support plate or grid [8]
11/04	. . Movable stairways, e.g. of loft ladders which may or may not be concealable or extensible (ship ladders B63B; stairs for aircraft B64F; escalators or moving walkways B66B)	Group E04F 13/09 takes precedence over groups E04F 13/10 E04F 13/18. [8]	
11/06	. . . collapsible, e.g. folding, telescopic	13/10	. . . of wood [1,8]
11/09	. . Tread-and-riser units [6]	13/12	. . . of metal [1,8]
11/104	. . Treads (E04F 11/09 takes precedence) [6]	13/14	. . . of stone or stone-like materials, e.g. ceramics; of glass [1,8]
11/108	. . . of wood [6]	13/15	 characterised by the use of glass elements [8]
11/112	. . . of metal [6]	13/16	. . . of fibres or chips, e.g. bonded with synthetic resins [1,8]
11/116	. . . of stone, concrete or like material [6]		
11/16	. . . Surfaces thereof; Protecting means for the edges or corners thereof (floor fabrics, fastenings therefor A47G 27/00)		
11/17	 Surfaces [6]		
11/18	. Balustrades; Handrails (guard-rails on ships B63B; for bridges E01D 19/10; for roads E01F 13/00, E01F 15/00; fences E04H 17/00)		

E04F

- 13/18 . . . of organic plastics with or without reinforcements or filling materials (of plastic-bound fibres or chips E04F 13/16) [1,8]
- 13/21 . . Fastening means specially adapted for covering or lining elements [8]
- 13/22 . . . Anchors, support angles or consoles [8]
- 13/23 . . . adjustable [8]
- 13/24 . . . Hidden fastening means on the rear of the covering or lining elements (E04F 13/30 takes precedence) [8]
- 13/25 . . . adjustable [8]
- 13/26 . . . Edge engaging fastening means, e.g. clamps, clips or border profiles [8]
- 13/28 . . . adjustable [8]
- 13/30 . . . Magnetic fastening means [8]
- 15/00 Flooring** (stair treads E04F 11/104; coverings not specially adapted for floors E04F 13/00; borders, skirtings E04F 19/02; gratings for cleaning soles of footwear A47L 23/24; of similar materials to roads E01C; basic or rough floors E04B 5/00) [6]
- 15/02 . Flooring or floor layers composed of a number of similar elements (of webs E04F 15/16)
- 15/022 . . Flooring consisting of parquetry tiles on a non-rollable sub-layer of other material, e.g. board, concrete, cork [2]
- 15/024 . . Sectional false floors, e.g. computer floors
- 15/04 . . only of wood, e.g. with wooden connecting members (rollable parquet E04F 15/16)
- 15/06 . . of metal, whether or not in combination with other material (gratings as building elements E04C 2/42)
- 15/08 . . only of stone or stone-like material, e.g. concrete; of glass
- 15/10 . . of other materials, e.g. fibrous or chipped materials, organic plastics, magnesite, hardboard
- 15/12 . Flooring or floor layers made of masses in situ, e.g. seamless magnesite floors, terrazzo (inorganic or bituminous masses C04B; organic plastic masses C08L)
- 15/14 . . Construction of joints, e.g. dividing strips (sealing joints not restricted to flooring E04B 1/68)
- 15/16 . Flooring, e.g. parquet on flexible web, laid as flexible webs; Webs specially adapted for use as flooring (resiliently-mounted floors, e.g. sprung floors, E04F 15/22; linoleum D06N; webs in general, manufacturing of webs, see the relevant classes)
- 15/18 . Separately-laid insulating layers; Other additional insulating measures; Floating floors (insulating of buildings in general E04B 1/62)
- 15/20 . . for sound insulation
- 15/22 . Resiliently-mounted floors, e.g. sprung floors (laid as webs E04F 15/16) [2]
- 17/00 Vertical ducts; Channels, e.g. for drainage** (pipes in general F16L; pipe-line systems F17D)
- 17/02 . for carrying away waste gases, e.g. flue gases (free-standing chimneys E04H 12/28; connections between fireplace and chimney, chimney fittings, covers for cleaning holes of chimneys F23J; chimney tops F23L); Building elements specially designed therefor, e.g. shaped bricks or sets thereof
- 17/04 . Air-ducts or air channels
- 17/06 . Light shafts, e.g. for cellars
- 17/08 . for receiving utility lines, e.g. cables, pipes (covers giving access to the ducts or channels, covers of inspection holes E04F 19/08) [6]
- 17/10 . Arrangements in buildings for the disposal of refuse (refuse bins, gathering or removal of refuse B65F)
- 17/12 . . Chutes
- 19/00 Other details or constructional parts for finishing work on buildings** (ladders, e.g. climbing irons, E06C 9/04)
- 19/02 . Borders; Finishing strips, e.g. beadings; Light covers (for protecting edges of plaster E04F 13/06)
- 19/04 . . for use between floor or ceiling and wall, e.g. skirtings
- 19/06 . . specially designed for securing panels
- 19/08 . Built-in cupboards; Masks of niches; Covers of holes enabling access to installations (clean-out doors of chimneys F23J)
- 19/10 . Built-in gratings, e.g. foot-scrapers
- 21/00 Implements for finishing work on buildings** (for working or treating building elements of stone or stone-like material B28D; designed specifically for special details provided for in the other groups of this subclass, see the relevant groups for the details)
- 21/02 . for applying plasticised masses to surfaces, e.g. plastering walls (specially for laying flooring E04F 21/20; applying liquids or other fluent materials to surfaces, in general B05; decorative arts B44)
- 21/04 . . Patterns or templates; Jointing rulers
- 21/05 . . . Supports for jointing rulers
- 21/06 . . Implements for applying plaster, insulating material, or the like
- 21/08 . . . Mechanical implements (E04F 21/14 takes precedence; spraying apparatus in general B05B; sand-blasting B24C)
- 21/10 centrifugally acting
- 21/12 acting by gas pressure, e.g. steam pressure
- 21/14 . . . in shafts, e.g. chimneys
- 21/16 . . Implements for after-treatment of plaster or the like, e.g. smoothing tools, profile trowels
- 21/165 . for finishing joints, e.g. implements for raking or filling joints, jointers (bricklayers' tools E04G 21/16; repairing, e.g. filling cracks, E04G 23/02) [3]
- 21/18 . for setting wall or ceiling slabs or plates (tools for mosaic work B44C)
- 21/20 . for laying flooring (made of similar material to roads or pavements E01C)
- 21/22 . . of single elements, e.g. flooring cramps
- 21/24 . . of masses made in situ, e.g. smoothing tools
- 21/26 . for mounting staircases, e.g. tools for marking steps
- 21/28 . for glazing (glass cutters C03B 33/10)
- 21/30 . . Putty squeezers or guns
- 21/32 . . Putty knives; Putty removers