

## ECLA EUROPEAN CLASSIFICATION

### E04F FINISHING WORK ON BUILDINGS, e.g. STAIRS, FLOORS (windows, doors E06B)

[N: **WARNING** [C2011.11]

- The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:

[E04F11/09](#) covered by [E04F11/02](#)  
[E04F11/17](#) covered by [E04F11/16](#)

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**E04F10/00** **Sunshades**, [N: e.g. Florentine blinds or jalousies; Outside screens ([E06B9/26](#) takes precedence)]; **Awnings** [N: or baldachins (for caravans [B60P3/34B1](#))]; (trailer awnings [E04H15/08](#); for tents [E04H15/58](#)) [C0304]

- [E04F10/00B](#) . [N: Rigidly-arranged sunshade roofs with coherent surfaces] [N0305]
- [E04F10/02](#) . of flexible canopy materials, e.g. canvas; [N: Baldachins]
- [E04F10/04](#) . . with material fixed on sections of a collapsible frame [N: especially Florentine blinds]
- [E04F10/06](#) . . comprising a roller-blind with means for holding the end away from a building [C0702]
- [E04F10/06B](#) . . . [N: with telescopic arms] [N0605] [C0804]
- [E04F10/06D](#) . . . [N: with guiding-sections for supporting the movable end of the blind] [N0605]
- [E04F10/06F](#) . . . [N: with articulated arms supporting the movable end of the blind for deployment of the blind] [C0605]
- [E04F10/06F10](#) . . . . [N: whereby the pivot axis of the articulation is parallel to the roller] [N0605]
- [E04F10/06F20](#) . . . . [N: whereby the pivot axis of the articulation is perpendicular to the roller] [N0605]
- [E04F10/06F20A](#) . . . . . [N: whereby the plane defined by three consecutive articulation points of an articulated arm is not parallel to the rotation axis of the roller, e.g. to create a saddle type roof construction or to prevent contact between the cloth and the arm sections] [N0906]
- [E04F10/06F30](#) . . . . . [N: whereby the roller is installed on the articulated arms] [N0801]
- [E04F10/06F40](#) . . . . . [N: whereby the arm is of the lazy tong type] [N0804]
- [E04F10/06H](#) . . . . [N: Arrangements for fastening the flexible canopy material to the supporting structure (fastening roller shutters to rollers [E06B9/171](#))] [N0605]
- [E04F10/06J](#) . . . . [N: with mechanisms for adjusting the inclination of the blind] [N0605]
- [E04F10/06J10](#) . . . . . [N: whereby the mechanism changes the inclination of the blind during unrolling] [C0804]
- [E04F10/06L](#) . . . . [N: with mechanisms for unrolling or balancing the blind] [N0605]
- [E04F10/06L2](#) . . . . . [N: acting on the roller tube] [N0807]
- [E04F10/06L4](#) . . . . . [N: acting on the arms] [N0807]

- E04F10/06L6 . . . . [N: acting on the movable end, e.g. front bar] [N0807]
- E04F10/06L8 . . . . [N: Control systems therefor] [N0807]
- E04F10/06N . . . . [N: with arrangements for fastening the blind to the building] [N0605]
- E04F10/06P . . . . [N: Accessories] [C0605]
- E04F10/06P1 . . . . [N: acting as intermediate support of the flexible canopy] [N0605]
- E04F10/06P2 . . . . [N: acting as separate supporting bar] [N0605]
- E04F10/06P3 . . . . [N: acting as centre bearing] [N0605]
- E04F10/06P4 . . . . [N: Support posts for the movable end of the blind] [N0804]
- E04F10/06R . . . . [N: Covers or housings for the rolled-up blind] [N0804]
- E04F10/06R10 . . . . [N: with the housing taking up the articulated arms] [N0804]
- E04F10/06T . . . . [N: Front bars] [N1108]
- E04F10/06T10 . . . . [N: with means to attach an auxiliary screen] [N1108]
  
- E04F10/08 . . . . of a plurality of similar rigid parts, e.g. slabs, lamellae [N: ([E04F10/00B](#) takes precedence)] [C0305]
- E04F10/10 . . . . collapsible [N: or extensible; metallic Florentine blinds; awnings with movable parts such as louvres; (shutters [E06B9/04](#); louvre windows [E06B7/08](#))]
  
- E04F11/00**                    **Stairways, ramps, or like structures (mounting or marking-off stairways E04F21/26; of temporary [N: use during building] construction E04G27/00; means for facilitating access to swimming pools E04H4/14C; [N: means for facilitating access to swimming pools E04H4/14C; appliances for aiding patients or disabled persons to walk A61H3/00]); Balustrades; Handrails (ladders permanently attached to fixed structures E06C9/00) [N1204]**
  
- E04F11/00A . . . . [N: Ramps] [N1204]
- E04F11/02 . . . . Stairways; Layouts thereof
- E04F11/02A . . . . [N: Space-saving stairways, e.g. having half steps] [N1204]
- E04F11/022 . . . . characterised by the supporting structure [N0502]
- E04F11/022A . . . . [N: Cantilevered stairways ([E04F11/032](#) takes precedence)] [N1204]
- E04F11/022B . . . . [N: Stairways having treads supported by balusters] [N1204]
- E04F11/025 . . . . Stairways having stringers [N: ([E04F11/035](#) takes precedence)] [N0502]
- E04F11/025B . . . . . [N: having adjustable gradient ([E04F11/104B](#) takes precedence)] [N1204]
- E04F11/028 . . . . . having a central stringer [N0502]
- E04F11/032 . . . . . Spiral stairways supported by a central column [N0502]
- E04F11/035 . . . . . Stairways consisting of a plurality of assembled modular parts without further support [N: ([E04F11/032](#) takes precedence)] [N0502]
- E04F11/038 . . . . . each modular part having a load-bearing balustrade part [N0502]
- E04F11/04 . . . . 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](#))
- E04F11/06 . . . . collapsible, e.g. folding, telescopic
- E04F11/06A . . . . . [N: folding] [N1204]
- E04F11/06A1 . . . . . . [N: with stringers overlapping when folded] [N1204]
- E04F11/06A2 . . . . . . [N: folding like scissors or accordions] [N1204]

E04F11/06B	. . . .	[N: telescopic] [N1204]
E04F11/09	. .	Tread-and-riser units [N1204]
E04F11/104	. .	Treads [N0102]
E04F11/104B	. . .	[N: having means to adjust the height, the depth and/or the slope of the stair steps (E04F11/104C to E04F11/116 take precedence)] [N1204]
E04F11/104C	. . .	[N: with an upper layer of fibres or chips, e.g. bonded with synthetic resins] [N1204]
E04F11/104D	. . .	[N: with an upper layer of organic plastics with or without reinforcements or filling materials] [N1204]
E04F11/104E	. . .	[N: composed of several layers, e.g. sandwich panels (layered products in general B32B; producing decorative panels or veneers B44C5/04)] [N1204]
E04F11/108	. . .	of wood [N: or with an upper layer of wood] [N1204]
E04F11/112	. . .	of metal [N: or with an upper layer of metal] [N1204]
E04F11/116	. . .	of stone, concrete or like material [N: or with an upper layer of stone or stone like material, e.g. ceramics, concrete; of glass or with an upper layer of glass] [N1204]
E04F11/16	. . .	Surfaces thereof; Protecting means for edges or corners thereof ([N: loosely laid coverings,] floor fabrics, fastenings therefor <a href="#">A47G27/00</a> )
E04F11/16B	. . . .	[N: Protecting means for edges or corners]
E04F11/16B1	. . . . .	[N: with means for fixing a separate edging strip] [N1204]
E04F11/17	. . . .	Surfaces [N: (guard covers of stairs <a href="#">E04G21/30</a> )] [N1204]
E04F11/17A	. . . . .	[N: Covering panels for tread restoration] [N1204]
E04F11/18	. .	Balustrades; Handrails (guard-rails on ships B63B; for bridges E01D19/10; for roads E01F13/00, E01F15/00; fences E04H17/00; [N: safety measures for persons during the construction of buildings E04G21/32]) [N1204]
E04F11/18A	. .	[N: Handrails mounted on walls, e.g. on the wall side of stairs] [N1204]
E04F11/18A1	. . .	[N: Details of anchoring to the wall] [N1204]
E04F11/18A3	. . .	[N: Handrail members; Connections between handrail members] [N1204]
E04F11/18F	. .	[N: Balustrades]
E04F11/18F1	. . .	[N: Details of anchoring to the wall or floor] [N1204]
E04F11/18F1B	. . . .	[N: Covers for the base portions of the balustrade posts] [N1204]
E04F11/18F2	. . .	[N: Connections therefor (E04F11/18F1 and E04F11/18F3 take precedence)] [N1204]
E04F11/18F2P	. . . .	[N: with adjustable angle, e.g. pivotal connections]
E04F11/18F3	. . .	[N: Handrails of balustrades; Connections between handrail members]
E04F11/18F3B	. . . .	[N: Laterally displaced handrail] [N1204]
E04F11/18F3H	. . . .	[N: of variable curvature; flexible]
E04F11/18F5	. . .	[N: Balusters; Grille-type elements]
E04F11/18F5B	. . . .	[N: Grille-type elements] [N1204]
E04F11/18F5D	. . . .	[N: Balusters with means for fixing to the floor] [N1204]
E04F11/18F5F	. . . .	[N: Separate means for spacing balusters apart] [N1204]
E04F11/18F6	. . .	[N: Filling panels, e.g. concrete, sheet metal panels] [N1204]
E04F11/18F6A	. . . .	[N: Glass panels] [N1204]
E04F11/18F6B	. . . .	[N: Wire mesh panels] [N1204]

- E04F11/18F6C . . . . [N: Flexible panels or nets] [N1204]
- E04F11/18F7 . . . . [N: Wire cables or the like filling elements] [N1204]
- E04F11/18F9 . . . . [N: with additional safety means for children, e.g. nets or fillings between balusters] [N1204]
- E04F11/18J . . . [N: Built-in aids for ascending or descending stairs (lifts associated with stairs [B66B9/08](#))]
- E04F11/18K . . . [N: Collapsible or portable balustrades] [N1204]
  
- E04F13/00** **Coverings or linings, e.g. for walls or ceilings (flooring E04F15/00; decoration of surfaces, mosaic work B44, e.g. paper-hanging B44C7/00; made of webs, e.g. of fabrics or wallpaper, [N: as such, or their manufacturing] D03D, D04G, D04H, D06N, D21H; construction of [N: false] ceilings E04B9/00; roofings or similar water-tight coverings against precipitation E04D) [N1204]**
  
- E04F13/00A . . . [N: made of webs, e.g. of fabrics, or wallpaper, used as coverings or linings (of a number of similar elements carried by a common web E04F13/08C; paperhanging, tapestry work B44C7/00)] [N1204]
- E04F13/00A1 . . . [N: Stretched foil- or web-like elements attached with edge gripping devices] [N1204]
- E04F13/00B . . . [N: Outer coverings for walls with ventilating means] [N1204]
- E04F13/02 . . . of plastic materials hardening after applying, e.g. plaster ([surface treatment in painting technique B44D](#); [inorganic or bituminous masses C04B](#); [organic plastics C08L](#)) [N: implements for applying plasticised materials [E04F21/02](#)]
- E04F13/04 . . . Bases for plaster ([sub-ceilings with plaster-carrying means E04B9/06](#))
- E04F13/04A . . . . [N: Joint tapes] [N1204]
- E04F13/04B . . . . [N: Means for fastening plaster-bases to a supporting structure]
- E04F13/04C . . . . [N: Plaster carrying meshes] [N1204]
- E04F13/06 . . . . Edge-protecting borders [N: (borders for joints between plaster layers and window or door frames or like E06B1/62)] [N1204]
- E04F13/06J . . . . [N: combined with mesh material or the like to allow plaster to bond therewith] [N1204]
  
- E04F13/07 . . . composed of covering or lining elements; Sub-structures therefor; Fastening means therefor [N1204]
- E04F13/072 . . . composed of specially adapted, structured or shaped covering or lining elements [N1204]
- E04F13/073 . . . . for particular building parts, e.g. corners or columns [N1204]
- E04F13/073A . . . . . [N: for corners] [N1204]
- E04F13/073B . . . . . [N: for columns] [N1204]
- E04F13/074 . . . . for accommodating service installations or utility lines, e.g. heating conduits, electrical lines, lighting devices or service outlets [N: (not used; accommodating heating conduits F24D; accommodating electrical cables or lines H02G3/00; accommodating lighting devices F21V33/00B)] [N1204]
- E04F13/075 . . . . for insulation or surface protection, e.g. against noise or impact [N: (not used; for insulation, e.g. against noise E04B1)] [N1204]
- E04F13/076 . . . . characterised by the joints between neighbouring elements, e.g. with joint fillings or with tongue and groove connections [N: (not used, see E04F13/08R)] [N1204]

- E04F13/077 . . . composed of several layers, e.g. sandwich panels (E04F 13/075 takes precedence) [N: (not used, see E04F13/08E)] [N1204]
- E04F13/078 . . . Stretched foil- or web-like elements attached with edge gripping devices [N: (not used, see E04F13/00A1)] [N1204]
- E04F13/08 . . . composed of a plurality of similar covering or lining elements, ([E04F13/072](#) takes precedence; borders, skirtings [E04F19/02](#); [N: of webs or fabrics [E04F13/00A](#); fixing strips [E04F19/06](#); separate provisional spacers between adjacent tiles [E04F21/00S](#); implements or means for setting tiles [E04F21/18](#)])
- E04F13/08B . . . [N: Separate fastening elements ([E04F13/08N](#), [E04F13/08Q](#) take precedence)]
- E04F13/08B2 . . . . [N: with load-supporting elongated furring elements between wall and covering elements]
- E04F13/08B2B . . . . . [N: with additional fastening elements between furring elements and the wall]
- E04F13/08B2B2 . . . . . [N: adjustable perpendicular to the wall]
- E04F13/08B2B3 . . . . . [N: adjustable in several directions one of which is perpendicular to the wall]
- E04F13/08B2C . . . . . [N: with additional fastening elements between furring elements and covering elements]
- E04F13/08B2C2 . . . . . [N: fixed by means of spring action]
- E04F13/08B2C4 . . . . . [N: fixed by means of clamping action]
- E04F13/08B2C6 . . . . . [N: the additional fastening elements extending into the back side of the covering elements ([E04F13/08B2C10](#) takes precedence)]
- E04F13/08B2C6A . . . . . {7 dots} [N: extending completely through the covering elements] [N1204]
- E04F13/08B2C6C . . . . . {7 dots} [N: inserted into grooves in the back side of the covering elements] [N1204]
- E04F13/08B2C8 . . . . . [N: the additional fastening elements located in-between two adjacent covering elements]
- E04F13/08B2C8B . . . . . {7 dots} [N: piercing the side faces of the covering elements]
- E04F13/08B2C8D . . . . . {7 dots} [N: engaging side holes preformed into the covering elements]
- E04F13/08B2C8F . . . . . {7 dots} [N: engaging side grooves running along the whole length of the covering elements]
- E04F13/08B2C8H . . . . . {7 dots} [N: engaging the outer surface of the covering elements, e.g. at the corners] [N1204]
- E04F13/08B2C10 . . . . . [N: Hooking means on the back side of the covering elements] [N1204]
- E04F13/08B3 . . . . . [N: without load-supporting elongated furring elements between wall and covering elements]
- E04F13/08B3A . . . . . [N: not adjustable ([E04F13/08B3C](#) takes precedence; not used, see subgroups)]
- E04F13/08B3A2 . . . . . [N: the fastening elements extending into the back side of the covering elements ([E04F13/08B3A8](#) takes precedence)]
- E04F13/08B3A2B . . . . . {7 dots} [N: extending completely through the covering elements] [N1204]
- E04F13/08B3A3 . . . . . [N: the fastening elements situated at the corners of the covering elements, not extending through the covering]

E04F13/08B3A4	. . . . .	[N: the fastening elements engaging the outer surface of the covering elements, not extending through the covering ( <a href="#">E04F13/08B3A3</a> and <a href="#">E04F13/08B3A6</a> take precedence)]
E04F13/08B3A4A	. . . . .	{7 dots} [N: specially adapted for thin sheet-like materials, e.g. sheet-metal or plastics]
E04F13/08B3A4B	. . . . .	{7 dots} [N: with means piercing the side faces of the covering elements]
E04F13/08B3A6	. . . . .	[N: the fastening elements engaging holes or grooves in the side faces of the covering elements ( <a href="#">E04F13/08B3A2</a> and <a href="#">E04F13/08B3A3</a> take precedence)]
E04F13/08B3A6A	. . . . .	{7 dots} [N: specially adapted for thin sheet-like materials, e.g. sheet-metal or plastics]
E04F13/08B3A6B	. . . . .	{7 dots} [N: with means piercing the side faces of the covering elements]
E04F13/08B3A8	. . . . .	[N: Hooking means on the back side of the covering elements] [N1204]
E04F13/08B3B	. . . . .	[N: adjustable perpendicular to the wall]
E04F13/08B3B2	. . . . .	[N: adjustable in several directions, one of which is perpendicular to the wall]
E04F13/08B3C	. . . . .	[N: Supporting consoles, e.g. adjustable only in a direction parallel to the wall ( <a href="#">E04F13/08B3B</a> takes precedence)]
E04F13/08B3D	. . . . .	[N: fixed by means of spring action] [N1204]
E04F13/08B3E	. . . . .	[N: fixed by means of clamping action] [N1204]
E04F13/08C	. . . . .	[N: composed of a number of elements which are identical or not, e.g. carried by a common web, support plate or grid]
E04F13/08D	. . . . .	[N: composed of superposed elements which overlap each other and of which the flat outer surface includes an acute angle with the surface to cover]
E04F13/08E	. . . . .	[N: composed of several layers, e.g. sandwich panels or layered panels (layered products as such in general B32B; producing decorative panels or veneers <a href="#">B44C5/04</a> ; <a href="#">E04F13/08D</a> , <a href="#">E04F13/08M</a> take precedence)] [N1204]
E04F13/08F	. . . . .	[N: having acoustic absorption means on the visible surface]
E04F13/08H	. . . . .	[N: having conduits for fluids]
E04F13/08K	. . . . .	[N: having an ornamental or specially shaped visible surface ( <a href="#">E04F13/08F</a> takes precedence)]
E04F13/08K2	. . . . .	[N: the visible surface imitating natural stone, brick work, tiled surface or the like ( <a href="#">E04F13/10B</a> , <a href="#">E04F13/12B</a> , <a href="#">E04F13/14J</a> , <a href="#">E04F13/16B</a> , <a href="#">E04F13/18B</a> take precedence)] [N1204]
E04F13/08M	. . . . .	[N: having a basic insulating layer and at least one covering layer]
E04F13/08M2	. . . . .	[N: the covering layer comprising mutual alignment or interlocking means]
E04F13/08M4	. . . . .	[N: the basic insulating layer comprising mutual alignment or interlocking means]
E04F13/08N	. . . . .	[N: fixed directly to the wall by means of magnets, hook and loop-type or similar fasteners, not necessarily involving the side faces of the covering element]
E04F13/08N1	. . . . .	[N: by hook and loop-type fasteners] [N1204]
E04F13/08N2	. . . . .	[N: by magnets] [N1204]
E04F13/08Q	. . . . .	[N: specially adapted for being adhesively fixed to the wall; Fastening means therefor; Fixing by means of plastics materials hardening after application]
E04F13/08Q2	. . . . .	[N: Adhesive means specially adapted therefor, e.g. adhesive foils or strips] [N1204]

- E04F13/08R . . . [N: characterised by the joints between neighbouring elements, e.g. with joint fillings or with tongue and groove connections]
- E04F13/08R1 . . . . [N: with joint fillings] [N1204]
- E04F13/08R2 . . . . [N: with means for aligning the outer surfaces of the covering elements ([E04F13/08R3](#) takes precedence)] [N1204]
- E04F13/08R3 . . . . [N: with tongue and groove connections] [N1204]
- E04F13/08R4 . . . . [N: with adhesive joining strips ([E04F13/08R3](#), [E04F13/08R5](#) take precedence)] [N1204]
- E04F13/08R5 . . . . [N: with sealing elements between coverings (sealings of joints between building constructions in general [E04B1/68](#))] [N1204]
- E04F13/09 . . . of elements attached to a common web, support plate or grid [N: (not used, see [E04F13/08C](#))] [N1204]
- E04F13/10 . . . of wood [N: or with an outer layer of wood ([E04F13/08D](#) takes precedence)]
- E04F13/10B . . . . [N: with an outer layer imitating natural stone, brick work, tiled surface or the like] [N1204]
- E04F13/12 . . . of metal [N: or with an outer layer of metal or enameled metal ([E04F13/08D](#) takes precedence)]
- E04F13/12B . . . . [N: with an outer layer imitating natural stone, brick work, tiled surface or the like]
- E04F13/12D . . . . [N: with an outer layer of wire mesh, wire grid or the like, e.g. gabions] [N1204]
- E04F13/14 . . . stone or stone-like materials, e.g. ceramics [N: concrete, ]; of glass [N: or with an outer layer of stone or stone-like materials or glass ([E04F13/08D](#) takes precedence; producing shaped elements from concrete, ceramic compositions or other stone-like materials B28B; prefabricated panels in general [E04C2/00](#))]
- E04F13/14B . . . . [N: with an outer layer of concrete ([E04F13/14J](#) takes precedence)]
- E04F13/14D . . . . [N: with an outer layer of ceramics or clays]
- E04F13/14F . . . . [N: with an outer layer of marble or other natural stone]
- E04F13/14H . . . . [N: with an outer layer of glass]
- E04F13/14J . . . . [N: with an outer layer imitating natural stone, brick work or the like]
- E04F13/14L . . . . [N: with an outer layer of asbestos cement or the like] [N1204]
- E04F13/15 . . . . characterised by the use of glass elements [N: , i.e. wherein an outer layer is not of glass ([E04F13/14H](#) takes precedence)] [N1204]
- E04F13/16 . . . of fibres or chips, e.g. bonded with synthetic resins [N: , or with an outer layer of fibres or chips ([E04F13/08D](#) takes precedence)] [M1208]
- E04F13/16B . . . . [N: with an outer layer imitating natural stone, brick work, tiled surface or the like] [N1204]
- E04F13/18 . . . of organic plastics with or without reinforcements or filling materials (of plastic-bound fibres or chips [E04F13/16](#)) [N: or with an outer layer of organic plastics with or without reinforcements or filling materials; plastic tiles ([E04F13/08D](#) takes precedence)]
- E04F13/18B . . . . [N: with an outer layer imitating natural stone, brick work, tiled surface or the like]
- E04F13/21 . . . Fastening means specially adapted for covering or lining elements [N: (not used, see [E04F13/08B](#))] [N1204]
- E04F13/22 . . . Anchors, support angles or consoles [N: (not used, see [E04F13/08B](#))] [N1204]
- E04F13/23 . . . . adjustable [N: (not used, see [E04F13/08B](#))] [N1204]
- E04F13/24 . . . Hidden fastening means on the rear of the covering or lining elements

- (E04F13/30 takes precedence) [N: (not used, see E04F13/08B)] [N1204]
- E04F13/25 . . . . adjustable [N: (not used, see E04F13/08B)] [N1204]
- E04F13/26 . . . Edge engaging fastening means, e.g. clamps, clips or border profiles [N: (not used, see E04F13/08B)] [N1204]
- E04F13/28 . . . . adjustable [N: (not used, see E04F13/08B)] [N1204]
- E04F13/30 . . . Magnetic fastening means [N: (not used, see E04F13/08N2)] [N1204]
  
- E04F15/00** **Flooring (stair treads E04F11/104; coverings not specially adapted for floors E04F13/00; borders, skirtings E04F19/02; [N: implements for laying flooring E04F21/20;] gratings for cleaning soles of footwear A47L23/24; [N: built-in gratings E04F19/10; removing floor coverings E04G23/00; carpets A47G27/00;] of similar materials to roads E01C; basic or rough floors [N: , structural floors] E04B5/00) [N1204]**
  
- E04F15/02 . Flooring or floor layers composed of a number of similar elements (of webs [E04F15/16](#))
- E04F15/02A . . [N: Construction of joints, e.g. dividing strips ([E04F15/024](#), [E04F15/04](#), [E04F15/06](#), [E04F15/10](#) and [E04F15/14](#) take precedence; Separate provisional spacers [E04F21/00S](#))] [N9505]
- E04F15/02A1 . . . [N: with joint fillings integrated in the flooring elements] [N1204]
- E04F15/02A2 . . . [N: with sealing elements between flooring elements (sealings of joints between building constructions in general E04B1/68)] [N1204]
- E04F15/02A3 . . . [N: with means for aligning the outer surfaces of the flooring elements (E04F15/02B takes precedence)] [N1204]
- E04F15/02A6 . . . [N: Means for spacing the flooring from an adjoining wall] [N1204]
- E04F15/02A8 . . . [N: Joints with beveled or recessed upper edges] [N1204]
- E04F15/02B . . [N: characterised by tongue and groove connections between neighbouring flooring elements] [N1204]
- E04F15/02C . . [N: Separate elements for fastening to an underlayer ([E04F15/02N](#), [E04F15/02Q](#) take precedence)] [N1204]
- E04F15/02N . . [N: fixed directly to an underlayer by means of magnets, hook and loop-type or similar fasteners, not necessarily involving the side faces of the flooring elements] [N1204]
- E04F15/02N1 . . . [N: by hook and loop-type fasteners] [N1204]
- E04F15/02N2 . . . [N: by magnets] [N1204]
- E04F15/02Q . . [N: specially adapted for being adhesively fixed to an underlayer; Fastening means therefor; Fixing by means of plastics materials hardening after application] [N1204]
- E04F15/02Q2 . . . [N: Adhesive means specially adapted therefor, e.g. adhesive foils or strips] [N1204]
- E04F15/02R . . [N: Floor elements with grooved main surface] [N1204]
- E04F15/02R1 . . . [N: wherein the grooves are filled with inserts] [N1204]
- E04F15/02S . . [N: Floor elements with an anti-skid main surface, other than with grooves] [N1204]
- E04F15/02T . . [N: Floor elements for use at a specific location (not used, see subgroups)] [N1204]
- E04F15/02T1 . . . [N: for outdoor use, e.g. in decks, patios, terraces, verandas or the like] [N1204]
- E04F15/02T2 . . . [N: for use in wet rooms] [N1204]
- E04F15/02U . . [N: Flooring consisting of a number of elements carried by a non-rollable common support plate or grid (E04F15/022 takes precedence)] [N1204]
- E04F15/022 . . Flooring consisting of parquetry tiles on a non-rollable sub-layer of other material,

- e.g. board, concrete, cork
- E04F15/024 . . . Sectional false floors, e.g. computer floors [N: (height-adjustable supports for terrace roof coverings [E04D11/00](#); underfloor heating using water [F24D3/14B2](#), using air [F24D5/10](#); installation of cables, lines or protective tubing in floors [H02G3/28](#))]
  - E04F15/024B . . . . [N: Floor panels]
  - E04F15/024B2 . . . . . [N: with integrated feet ([E04F15/024B4](#) takes precedence)]
  - E04F15/024B3 . . . . . [N: made of box-like elements] [N1204]
  - E04F15/024B3B . . . . . [N: filled with core material] [N1204]
  - E04F15/024B3B1 . . . . . [N: the core material hardening after application] [N1204]
  - E04F15/024B6 . . . . . [N: Sealing joints]
  - E04F15/024B6B . . . . . [N: Sealing strips integrated with the floor panels] [N1204]
  - E04F15/024D . . . . . [N: Supporting structures]
  - E04F15/024D2 . . . . . [N: Details of junctions between the supporting structures and the panels or a panel-supporting framework] [N1204]
  - E04F15/024D4 . . . . . [N: Framework supporting the panels]
  - E04F15/024D6 . . . . . [N: Height adjustable elements for supporting the panels or a panel-supporting framework] [N1204]
  - E04F15/024D6B . . . . . [N: Screw jacks]
  - E04F15/024D6B2 . . . . . [N: height-adjustable from the upper side of the floor]
  - E04F15/024D6B4 . . . . . [N: with a variable angle between panel and support]
  - E04F15/024D6D . . . . . [N: filled with material hardening after application] [N1204]
  - E04F15/024D8 . . . . . [N: with a plurality of base plates or like, each base plate having a plurality of pedestals upstanding therefrom to receive the floor panels] [N1204]
  - E04F15/04 . . . . only of wood [N: or with a top layer of wood], e.g. with wooden [N: or metal] connecting members (rollable parquet [E04F15/16](#)) [[C9505](#)] [N1204]
  - E04F15/04B . . . . . [N: with a top layer of wood in combination with a lower layer of other material] [N1204]
  - E04F15/04B2 . . . . . [N: the lower layer being of fibrous or chipped material, e.g. bonded with synthetic resins] [N1204]
  - E04F15/04B4 . . . . . [N: the lower layer being of organic plastic with or without reinforcements or filling materials] [N1204]
  - E04F15/04C . . . . . [N: Layered panels only of wood] [N1204]
  - E04F15/04C1 . . . . . [N: Plywood panels] [N1204]
  - E04F15/04D . . . . . [N: with a butcher-block like top surface] [N1204]
  - E04F15/04E . . . . . [N: with a top surface of assembled elongated wooden strip type] [N1204]
  - E04F15/06 . . . . of metal, whether or not in combination with other material (gratings as building elements [E04C2/42](#); [N: of elements with a metal upper layer; [E04F15/024B](#) takes precedence; metal treads [E04F11/112](#)]) [N1204]
  - E04F15/08 . . . . only of stone or stone-like material, e.g. [N: ceramics], concrete; of glass [N: or with a top layer of stone or stone-like material, e.g. ceramics, concrete or glass ([E04F15/02A](#) takes precedence)] [N1204]
  - E04F15/08B . . . . . [N: with a top layer of stone or stone-like material, e.g. ceramics, concrete or glass in combination with a lower layer of other material] [N1204]
  - E04F15/08B2 . . . . . [N: The lower layer being of fibrous or chipped material, e.g. bonded with synthetic resins] [N1204]
  - E04F15/08B4 . . . . . [N: The lower layer being of organic plastic with or without reinforcements or

- filling materials] [N1204]
- E04F15/10 . . of other materials, e.g. fibrous or chipped materials, organic plastics, magnesite [N: tiles], hardboard [N:, or with a top layer of other materials] [N1204]
  - E04F15/10A . . . [N: of fibrous or chipped materials, e.g. bonded with synthetic resins] [N1204]
  - E04F15/10B . . . [N: of organic plastics with or without reinforcements or filling materials] [N1204]
  - E04F15/10C . . . [N: composed of several layers, e.g. sandwich panels (layered products in general B32B; producing decorative panels or veneers B44C5/04)] [N1204]
  
  - E04F15/12 . Flooring or floor layers made of masses in situ, e.g. seamless magnesite floors, terrazzo [N: gypsum floors] (inorganic or bituminous masses C04B; organic plastic masses C08L)
  - E04F15/12B . . [N: Lost formworks for producing hollow floor screed layers, e.g. for receiving installations, ducts, cables (structural floors E04B5/00; filling elements for building-up floors E04B5/26; installation of cables, lines or protective tubing in floors H02G3/28)] [N1204]
  - E04F15/12D . . [N: Terrazzo floors] [N1204]
  - E04F15/14 . . Construction of joints, e.g. dividing strips ([N: E04F15/02A takes precedence;] sealing joints not restricted to flooring E04B1/68, [N: construction of joints in roads or airfields E01C11/02]) [N1204]
  - E04F15/14B . . . [N: Dividing strips or boundary strips] [N1204]
  - E04F15/14B2 . . . . [N: adjustable in height] [N1204]
  - E04F15/14B4 . . . . [N: interconnected to form a grid-like structure] [N1204]
  
  - E04F15/16 . Flooring, e.g. parquet on flexible web, laid as flexible webs; Webs specially adapted for use as flooring; [N: Parquet on flexible web] (resiliently-mounted floors, e.g. sprung floors, E04F 15/22; linoleum D06N; [N: carpets A47G27/00]) [N1204]
  - E04F15/16B . . [N: Webs specially adapted for use as finishing layers] [N1204]
  - E04F15/16D . . [N: Flooring consisting of a number of elements carried by a common flexible web, e.g. rollable parquet ] [N1204]
  
  - E04F15/18 . Separately-laid insulating layers; Other additional insulating measures; Floating floors (insulating of buildings in general E04B1/62)
  - E04F15/18B . . [N: Insulating layers integrally formed with the flooring or the flooring elements] [N1204]
  - E04F15/18D . . [N: Underlayers coated with adhesive or mortar to receive the flooring] [N1204]
  - E04F15/18D2 . . . [N: for areas prone to frost damage, e.g. for balconies or terraces] [N1204]
  - E04F15/18F . . [N: Underlayers in the form of studded or ribbed plates] [N1204]
  - E04F15/18H . . [N: Underlayers covered with a mesh or the like] [N1204]
  - E04F15/18J . . [N: Underlayers specially adapted to be laid with overlapping edges] [N1204]
  - E04F15/18L . . [N: Edge insulation strips, e.g. for floor screed layers (boundary strips in layers made of masses in situ E04F15/14B)] [N1204]
  
  - E04F15/20 . . for sound insulation
  - E04F15/20B . . . [N: Separately-laid layers for sound insulation] [N1204]
  - E04F15/20D . . . [N: Layered panels for sound insulation] [N1204]
  
  - E04F15/22 . Resiliently-mounted floors, e.g. sprung floors (laid as webs E04F15/16)
  - E04F15/22B . . [N: Shock absorber members therefor] [N1204]
  
  - E04F17/00**      **Vertical ducts; Channels, e.g. for drainage (pipes in general F16L; pipe-line**

**systems F17D; [N: drainage devices in floors E03F5/04; roof drainage E04D13/04] [N1204]**

- E04F17/00B . [N: Lift shafts]
- E04F17/02 . for carrying away waste gases, e.g. flue gases (free-standing chimneys [E04H12/28](#); 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 [N: (coke-ovens [C10B](#); working measures on existing vertical ducts [E04G23/02](#); apparatus for inserting new lining elements in existing ducts [E04G21/16](#); metallic chimneys, linings, joints and spacers therefor [F23J11/00](#), [F23J13/00](#))] [C9601]
- E04F17/02B . . [N: made of masonry, concrete or other stone-like material; Insulating measures and joints therefor] [N9601]
- E04F17/02D . . [N: Exterior cladding, e.g. of chimney parts extending above the roof; Rain covers for chimney tops without draught-inducing aspects (inducing draught in chimneys [F23L17/00](#))] [N9601]
- E04F17/04 . Air-ducts or air channels [N: (heating in general F24; ventilating rooms in general F24F)] [N1204]
- E04F17/06 . Light shafts, e.g. for cellars
- E04F17/08 . for receiving utility lines, e.g. cables, pipes (covers giving access to the ducts or channels, covers of inspection holes [E04F19/08](#)) [N1204]
- E04F17/10 . Arrangements in buildings for the disposal of refuse (refuse bins, gathering or removal of refuse [B65F](#))
- E04F17/12 . . Chutes [N1204]
- E04F17/12C . . . [N: Cleaning or disinfecting thereof] [N1204]
- E04F17/12C1 . . . . [N: with water flushing] [N1204]
- E04F19/00 Other details of constructional parts for finishing work on buildings (ladders, e.g. climbing irons, E06C9/04) [N1204]**
- E04F19/00B . [N: Chimney mantel pieces] [N1204]
- E04F19/02 . Borders; Finishing strips, e.g. beadings; Light coves (for protecting edges of plaster [E04F13/06](#))
- E04F19/02B . . [N: for use at vertical intersections of walls ([E04F19/02D2](#) takes precedence)] [N9412]
- E04F19/02B2 . . . [N: for outside use, e.g. imitating brickwork] [N9412]
- E04F19/02D . . [N: specially adapted for cushioning impacts] [N9412]
- E04F19/02D2 . . . [N: used at protruding corners] [N9412]
- E04F19/04 . . for use between floor or ceiling and wall, e.g. skirtings
- E04F19/04B . . . [N: between ceiling and wall] [N9412]
- E04F19/04D . . . [N: Hygienic or watertight plinths] [N9608]
- E04F19/04F . . . [N: characterised by the fixing method (not used, see subgroups)] [N9608]
- E04F19/04F1 . . . . [N: Plinths fixed by snap-action in a direction perpendicular to the wall]

- N9608]
- E04F19/04F2 . . . . [N: Plinths fixed by hooking in a direction parallel to the wall] [N9608]
  - E04F19/04F3 . . . . [N: Plinths fixed by means of magnets, hook and loop-type or similar fasteners] [N1204]
  - E04F19/04F4 . . . . [N: Plinths fixed by means of adhesive] [N1204]
  - E04F19/04G . . . . [N: Skirtings or crown mouldings with a separate cladding strip] [N1204]
  - E04F19/04K . . . . [N: Corner filling pieces] [N9608]
  - E04F19/04M . . . . [N: Plinths specially adapted for joining wall coverings to floor surfaces] [N9608]
  - E04F19/04R . . . . [N: Plinths fixed around wall openings or around corners of walls] [N9611]
  - E04F19/06 . . specially designed for securing panels [N: or masking the edges of wall- or floor-covering elements ([E04F19/02B](#), [E04F19/02D](#) and [E04F19/04](#) take precedence)] [C9412]
  - E04F19/06B . . . . [N: used to finish off an edge or corner of a wall or floor covering area (in connection with floor fabrics [A47G27/04C2](#); sealings between walls and baths [A47K3/04B](#))] [N9412]
  - E04F19/06C . . . . [N: used between similar elements (separate provisional spacers [E04F21/00S](#))] [N1204]
  - E04F19/06C2 . . . . [N: for simultaneously securing panels having different thicknesses] [N1204]
  - E04F19/06C4 . . . . [N: in corners] [N1204]
  - E04F19/06T . . . . [N: Finishing profiles with a T-shaped cross-section or the like] [N1204]
  - E04F19/06T1 . . . . [N: fixed onto a base profile by means of a separate connector] [N1204]
  - E04F19/06T2 . . . . [N: with means preventing a tipping movement] [N1204]
  - E04F19/06T3 . . . . [N: with means allowing a tipping movement] [N1204]
  - E04F19/08 . Built-in cupboards; Masks of niches; Covers of holes enabling access to installations ([N: inspection openings in bathtub aprons [A47K3/16B1](#); covers for electrical distribution boxes [H02G3/14](#); movable ceiling parts [E04B9/00B](#); removable wall partitions [E04B2/74](#); ] clean-out doors of chimneys [F23J](#)) [N1204]
  - E04F19/08B . . [N: Covers with fixing means providing for snap locking] [N1204]
  - E04F19/08D . . [N: Covers with magnetic fixing means] [N1204]
  - E04F19/10 . Built-in gratings, e.g. foot-scrapers
- E04F21/00**      **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 [N: working measures on existing buildings [E04G23/00](#); measuring angles or linear dimensions in general [G01B](#), [G01C](#); measuring inclination, e.g. by clinometers or levels [G01C9](#); reference lines, planes or sectors, generated by active optical means [G01C15/00A1](#))] [N1204]**
- E04F21/00B . [N: for mounting doors, windows or frames; their fitting([door-lifters](#)[B66F15/00](#))]
  - E04F21/00B1 . . [N: for mounting frames] [N1204]
  - E04F21/00B2 . . [N: for mounting door leaves, window sashes or the like] [N1204]
  - E04F21/00C . [N: for marking doors, windows or frames (templates for marking the position of hinges [E05D11/00B](#); templates for marking the position of doorlocks [E05B17/06](#))]
  - E04F21/00F . [N: for fitting sealing strips or like] [N1204]

- E04F21/00G . [N: for reshaping butt joints between adjacent panels, e.g. drywall panels (E04F21/165 takes precedence)] [N1204]
- E04F21/00H . [N: for installing edge-protecting borders] [N1204]
- E04F21/00H2 . . [N: with crimping means] [N1204]
- E04F21/00P . [N: for cutting or mounting plinths] [N9608]
- E04F21/00Q . [N: for marking and cutting tiles] [N1204]
- E04F21/00R . [N: Implements for removing filling material from joints] [N0304]
- E04F21/00S . [N: Separate provisional spacers used between adjacent floor or wall tiles (E04F13/08R, E04F15/02A takes precedence)] [N1204]
- E04F21/02 . for applying plasticised masses to surfaces, e.g. plastering walls ([N: wall covering made of hardening materials [E04F13/02](#)]; specially for flooring [E04F21/20](#); implements for painting or decorating [B44](#); applying liquids or other fluent materials to surfaces, in general [B05](#))
- E04F21/02T . . [N: for applying adhesive, e.g. glue or mortar, on the covering elements, in particular tiles] [N1204]
- E04F21/02U . . [N: for applying adhesive or joint compound to joint tapes, in particular drywall tapes (joint tapes E04F13/04A; drywall taper tools E04F21/165F)] [N1204]
- E04F21/04 . . Patterns or templates; Jointing rulers [N: (profile trowels [E04F21/16](#))] [C9802]
- E04F21/05 . . . Supports for jointing rulers
- E04F21/06 . . Implements for applying plaster, insulating material, or the like [N: (finishing [E04F21/16](#))]
- E04F21/08 . . . Mechanical implements ([E04F21/14](#) takes precedence; spraying in general [B05B](#); sand-blasting [B24C](#)) [C9901]
- E04F21/08B . . . . [N: for filling building cavity walls with insulating materials] [N9801]
- E04F21/10 . . . . centrifugally acting
- E04F21/12 . . . . acting by gas pressure, e.g. steam pressure
- E04F21/14 . . . . in shafts, e.g. chimneys
- E04F21/16 . . Implements for after-treatment of plaster or the like [N: before it has hardened or dried], e.g. smoothing-tools, profile trowels [N: (E04F21/04, E04F21/165 take precedence)] [N1204]
- E04F21/16B . . . [N: Trowels] [N1204]
- E04F21/16B2 . . . . [N: with a blade having a notched or toothed edge] [N1204]
- E04F21/16B4 . . . . [N: with exchangeable blades] [N1204]
- E04F21/165 . for finishing joints, e.g. implements for raking or filling joints, jointers (bricklayers' tools E04G21/16; repairing, e.g. filling cracks, E04G23/02; [N: wallpaper scrapers or the like B44C7/02; implements for cleaning joints A47L13/10]) [N1204]
- E04F21/165B . . [N: for smoothing and shaping joint compound to a desired contour] [N1204]
- E04F21/165D . . [N: for finishing corner joints] [N1204]
- E04F21/165F . . [N: for applying tape to joints, e.g. drywall taper tools] [N1204]
- E04F21/18 . for setting wall or ceiling slabs or plates (tools for mosaic work [B44C](#))

- E04F21/18B . . [N: Ceiling panel lifting devices] [N9603]
- E04F21/18B2 . . . [N: with hand-driven crank systems, e.g. rope, cable or chain winding or rack-and-pinion mechanisms ([E04F21/18B4](#), [E04F21/18B6](#) and [E04F21/18B8](#) take precedence)] [N9603]
- E04F21/18B4 . . . [N: fluid pressure-operated ([E04F21/18B6](#) and [E04F21/18B8](#) take precedence)] [N9603]
- E04F21/18B6 . . . [N: with pivotally mounted arms] [N9603]
- E04F21/18B8 . . . [N: Lazy-tongs mechanisms] [N9603]
- E04F21/18B10 . . . [N: spring-force actuated] [N1204]
- E04F21/18D . . [N: for setting a plurality of similar elements ([E04F21/18B](#) and [E04F21/18F](#) take precedence; separate provisional spacers [E04F21/00S](#))] [N9603]
- E04F21/18D2 . . . [N: by applying them one by one] [N9603]
- E04F21/18D2B . . . . [N: Temporary edge support brackets] [N9603]
- E04F21/18D2D . . . . [N: of elongated elements, e.g. sidings] [N9603]
- E04F21/18D2F . . . . [N: for setting insulating panels] [N1204]
- E04F21/18D2G . . . . [N: using magnets, hook and loop-type fastener or similar means] [N1204]
- E04F21/18D2H . . . . [N: using suction-cups] [N1204]
- E04F21/18D3 . . . [N: Leveling devices] [N1204]
- E04F21/18D4 . . . [N: by simultaneously applying several elements, e.g. templates] [N9603]
- E04F21/18D4B . . . . [N: using suction-cups] [N9603]
- E04F21/18F . . [N: Lever-type lifters gripping the bottom edge of wall panels ([door lifters B66F15/00](#))] [N9603]
  
- E04F21/20 . for laying flooring (made of similar material to roads or pavements [E01C](#); [N: arrangements for removing of previously fixed floor covering [E04G23/00](#)]) [N1204]
- E04F21/22 . . of single elements, e.g. flooring cramps; [N: flexible webs ([cutting tiles B28D1/22D](#))] [C9907]
- E04F21/24 . . of masses made in situ, e.g. smoothing tools [N: ([E04F21/04](#) takes precedence; finishing of concrete roads or pavings [E01C19/40](#); devices for levelling concrete floors [E04G21/10](#); devices for solidifying concrete floors by vibrating [E04G21/06C3](#))] [N1204]
- E04F21/24B . . . [N: Elongated smoothing blades or plates, e.g. screed apparatus] [N1204]
- E04F21/24B2 . . . . [N: with vibrating means, e.g. vibrating screeds] [N1204]
- E04F21/24B4 . . . . [N: with means to adjust the working angle of the leveling blade or plate] [N1204]
- E04F21/24H . . . [N: Rotary power trowels, i.e. helicopter trowels] [N1204]
- E04F21/24H2 . . . . [N: used by an operator sitting on the trowel, i.e. ride-on power trowels] [N1204]
- E04F21/24H4 . . . . [N: used by an operator walking behind the trowel, i.e. walk-behind power trowels] [N1204]
  
- E04F21/26 . for mounting staircases, e.g. tools for marking steps
  
- E04F21/28 . for glazing ([glass cutters C03B33/10](#))
- E04F21/30 . . Putty squeezers or guns [N: not used, see [B05C17/00B](#)]
- E04F21/32 . . Putty knives; Putty removers