SECTION E — FIXED CONSTRUCTIONS

E04 **BUILDING**

E04D ROOF COVERINGS; SKY-LIGHTS; GUTTERS; ROOF-WORKING TOOLS (coverings of outer walls by plaster or other porous material E04F 13/00)

Note(s)

In this subclass, the following expression is used with the meaning indicated:

"roof coverings" includes any similar kind of watertight covering against rain, snow, hail, or the like, for other parts of buildings.

Subclass index

ROOF COVERINGS	
Tiles or slates; slabs or stiff sheets; flexible materials	1/00, 3/00, 5/00, 11/00
Bulk materials, straw or thatch	7/00, 9/00, 11/00
Other materials	
SPECIAL ARRANGEMENTS IN CONNECTION WITH ROOF COVERINGS	12/00, 13/00
APPARATUS OR TOOLS FOR ROOF WORKING	15/00

1/00	Roof covering by making use of tiles, slates, shingles, or other small roofing elements (roofing supports E04D 12/00) [1, 2006.01]	1/36	• Devices for sealing the spaces or joints betwee covering elements (sealing joints not restricted roof covering elements E04B 1/68) [1, 2006.0]
1/02	 Grooved or vaulted roofing elements (E04D 1/28, E04D 1/30 take precedence) [1, 2006.01] 		Roof covering by making use of flat or curved
1/04	of ceramics, glass or concrete, with or without reinforcement [1, 2006.01]		or stiff sheets (E04D 1/00 takes precedence; buil roofs E04D 11/02) [1, 2006.01]

- 3/02 of plane slabs, slates, or sheets, or in which the cross-1/06 • of metal [1, 2006.01] section is unimportant (E04D 3/35 takes 1/08 • • of plastics; of fibrous materials [1, 2006.01] precedence) [1, 2006.01] of specified materials, or of combinations of 1/10
 - materials, not covered by any one of groups E04D 3/18) [1, 2006.01] E04D 1/04-E04D 1/08 [1, 2006.01] 3/06
- · Roofing elements shaped as plain tiles or shingles, 1/12 i.e. with flat outer surface (E04D 1/28, E04D 1/30 take precedence) [1, 2006.01]
- of slate material, with or without fastening 1/14 3/14 means [1, 2006.01]
- 1/16 of ceramics, glass or concrete, with or without 3/16 reinforcement [1, 2006.01]
- 1/18 • • of metal [1, 2006.01]
- 1/20 • • of plastics, fibrous materials, or wood [1, 2006.01]
- of specified materials, or of combinations of 1/22 materials, not covered by any one of groups E04D 1/14-E04D 1/20 [1, 2006.01]
- · Roofing elements with cavities, e.g. hollow tiles 1/24 (E04D 1/28 takes precedence) [1, 2006.01]
- 1/26 Strip-shaped roofing elements appearing as a row of shingles [1, 2006.01]
- 1/28 Roofing elements comprising two or more layers, e.g. for insulation [1, 2006.01]
- 1/30 Special roof-covering elements, e.g. ridge tiles, gutter tiles, gable tiles, ventilation tiles (E04D 3/40 takes precedence; roof covering aspects of energy collecting devices E04D 13/18) [1, 2006.01]
- 1/34 Fastenings for attaching roof-covering elements to the supporting elements [1, 2006.01]

- een roofot be 01]
- d slabs ilt-up
- 3/04 of concrete or ceramics (of asbestos cement
- of glass or other translucent material; Fixing means therefor (fixing glass panes by means applicable to windows E06B 3/54) [1, 2006.01]
- 3/08 with metal glazing bars [1, 2006.01]
- with glazing bars of other material, e.g. of glass [1, 2006.01]
- of metal [1, 2006.01]
- 3/18 of specified materials, or of combinations of materials, not covered by any of groups E04D 3/04, E04D 3/06 or E04D 3/16 [1, 2006.01]
- · with special cross-section, e.g. with corrugations on 3/24 both sides, with ribs, flanges, or the like (E04D 3/35 takes precedence) [1, 2006.01]
- 3/26 of concrete or ceramics [1, 2006.01]
- 3/28 of glass [1, 2006.01]
- 3/30 of metal [1, 2006.01]
- of plastics, fibrous materials, or asbestos 3/32 cement [1, 2006.01]
- 3/34 of specified materials, or of combinations of materials, not covered by any one of groups E04D 3/26-E04D 3/32 [1, 2006.01]
- · Roofing slabs or stiff sheets comprising two or more 3/35 layers, e.g. for insulation [1, 2006.01]
- 3/36 Connecting; Fastening [1, 2006.01]

IPC (2018.01), Section E

Note(s)

In groups E04D 3/361-E04D 3/368, additional small fastening elements, e.g. nails, screws, are not to be considered to be separate connecting elements.

- 3/361 • by specially-profiled marginal portions of the slabs or sheets [1, 2006.01]
- 3/362 • by locking the edge of one slab or sheet within the profiled marginal portion of the adjacent slab or sheet, e.g. using separate connecting elements [1, 2006.01]
- 3/363 • with snap action [1, 4, 2006.01]
- 3/3645 • by interference fitting **[4, 2006.01]**
- 3/365 by simple overlapping of the marginal portions with use of separate connecting elements, e.g. hooks or bolts for corrugated sheets [1, 2006.01]
- 3/366 by closing the space between the slabs or sheets by gutters, bulges, or bridging elements, e.g. strips [1, 2006.01]
- 3/367 • by permanent deformation of the marginal portions of adjacent slabs or sheets, e.g. by folding the edges [4, 2006.01]
- 3/368 • by forcing together the marginal portions of adjacent slabs or sheets [1, 2006.01]
- 3/369 • by welding of the marginal portions of adjacent slabs or sheets [1, 2006.01]
- Devices for sealing spaces or joints between roof-covering elements (E04D 3/36 takes precedence; sealing joints not restricted to roof covering elements E04B 1/68) [1, 2006.01]
- Slabs or sheets locally modified for auxiliary purposes, e.g. for resting on walls, for serving as guttering; Elements for particular purposes, e.g. ridge elements, specially designed for use in conjunction with slabs or sheets (roof covering aspects of energy collecting devices E04D 13/18) [1, 2006.01]
- 5/00 Roof covering by making use of flexible material, e.g. supplied in roll form (using stiff sheets E04D 3/00; gravelling of flat roofs E04D 7/00; built-up roofs E04D 11/02) [1, 2006.01]

Note(s)

Group E04D 5/12 takes precedence over groups E04D 5/02-E04D 5/08.

- of materials impregnated with sealing substances, e.g. roofing felt [1, 2006.01]
- 5/04 by making use of metal foils **[1, 2006.01]**
- 5/06 by making use of plastics [1, 2006.01]
- 5/08 by making use of other materials **[1, 2006.01]**
- by making use of compounded or laminated materials, e.g. metal foils or plastic films coated with bitumen (E04D 5/12 takes precedence) [1, 2006.01]
- specially modified, e.g. perforated, with granulated surface, with attached pads [1, 2006.01]
- 5/14 Fastening means therefor **[1, 2006.01]**
- 7/00 Roof covering by sealing masses applied in situ; Gravelling of flat roofs [1, 2006.01]
- 9/00 Roof covering by using straw, thatch, or like materials (impregnation against incendiary damage B27K) [1, 2006.01]
- 11/00 Roof covering, as far as not restricted to features covered by only one of groups E04D 1/00-E04D 9/00; Roof covering in ways not provided for by groups E04D 1/00-E04D 9/00 [1, 2006.01]

- Built-up roofs, i.e. consisting of two or more layers bonded together <u>in situ</u>, at least one of the layers being of watertight composition (gravelling of flat roofs E04D 7/00; venting or ventilation E04D 13/17) [1, 2006.01]
- 12/00 Non-structural supports for roofing materials, e.g. battens, boards (E04D 11/02 takes precedence) [1, 2006.01]
- 13/00 Special arrangements or devices in connection with roof coverings; Roof drainage (ventilation tiles E04D 1/30; ventilation slabs E04D 3/40; internal channels E04F 17/00; roofing elements therefor, see the relevant groups) [1, 2006.01]
- 13/02 Roof-covering aspects of dormer windows (E04D 13/14 takes precedence; structures therefor E04B 7/18) [1, 2006.01]
- 13/03 Sky-lights; Domes; Ventilating sky-lights (E04D 13/14 takes precedence; structures therefor E04B 7/18) [1, 2006.01]
- 13/035 • characterised by having movable parts **[1, 2006.01]**
- 13/04 Roof drainage; Drainage fittings in flat roofs (gutter tiles E04D 1/30; gutter slabs E04D 3/40; street gullies E03F 5/04) [1, 2006.01]
- 13/064 • Gutters [6, 2006.01]
- 13/068 • Means for fastening gutter parts together **[6, 2006.01]**
- 13/072 • Hanging means (in combination with means for fastening gutter parts together E04D 13/068) [6, 2006.01]
- 13/076 Devices or arrangements for removing snow, ice or debris from gutters or for preventing accumulation thereof [6, 2006.01]
- 13/08 • Down pipes; Special clamping means therefor (clamping pipes in general F16B, F16L) [1, 2006.01]
- 13/10 Snow traps **[1, 2006.01]**
- 13/12 Devices or arrangements allowing walking on the roof or in the gutter [1, 2006.01]
- 13/14 Junctions of roof sheathings to chimneys or other parts extending above the roof [1, 2006.01]
- 13/143 • with ventilating means **[6, 2006.01]**
- 13/147 • specially adapted for inclined roofs [6, 2006.01]
- 13/15 Trimming strips; Edge strips; Fascias (E04D 13/14 takes precedence) [1, 6, 2006.01]
- 13/152 • with ventilating means **[6, 2006.01]**
- 13/155 retaining the roof sheathing **[6, 2006.01]**
- 13/158 covering the overhang at the eave side, e.g. soffits, or the verge of saddle roofs **[6, 2006.01]**
- Insulating devices or arrangements in so far as the roof covering is concerned (methods for keeping dry building structures in general E04B 1/70; buildings for extreme climates E04H 9/16) [1, 6, 2006.01]
- 13/17 Ventilation of roof coverings not otherwise provided for (ventilation of rooms or spaces F24F) [6, 2006.01]
- 13/18 Roof covering aspects of energy collecting devices, e.g. including solar panels (solar heat collectors integrated in roof constructions F24S 20/67) [4, 2006.01, 2014.01, 2018.01]
- 15/00 Apparatus or tools for roof working [1, 2006.01]
- 15/02 for roof coverings comprising tiles, shingles, or like roofing elements [1, 2006.01]
- for roof coverings comprising slabs, sheets or flexible material [1, 2006.01]

• for handling roofing or sealing material in roll form **[1, 2006.01]**

• for handling roofing or sealing material in bulk form **[1, 2006.01]**

IPC (2018.01), Section E 3