**CPC**  
**COORDERATIVE PATENT CLASSIFICATION**

**E**  
**FIXED CONSTRUCTIONS**

**BUILDING**

**E04**  
**BUILDING**

**E04H**  
**BUILDINGS OR LIKE STRUCTURES FOR PARTICULAR PURPOSES; SWIMMING OR SPLASH BATHS OR POOLS; MASTS; FENCING; TENTS OR CANOPIES, IN GENERAL. (foundations E02D)**

**NOTES**

1. This subclass deals primarily with the layout of buildings as a whole, but includes details which are peculiar to types of buildings or buildings for special purposes, specified in the groups. The word "buildings" does not exclude engineering structures and other constructions.

2. This subclass provides for canopies in general and for canopies similar in construction to tents. For canopies having special application, see the relevant class, e.g. bed canopies A47C 29/00; protecting chairs against the weather A47C 7/66; sunshades or awnings for buildings E04F 10/00.

3. In this subclass, the term "tent" means a tent or canopy having a supporting means, e.g. frame and a flexible cover.

**WARNINGS**

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

<table>
<thead>
<tr>
<th>IPC Group</th>
<th>CPC Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>E04H 4/02</td>
<td>E04H 4/0018, E04H 4/0075</td>
</tr>
<tr>
<td>E04H 4/04</td>
<td>E04H 4/0018, E04H 4/0075</td>
</tr>
</tbody>
</table>

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00 Buildings or groups of buildings for dwelling or office purposes; General layout, e.g. modular co-ordination, staggered storeys (small buildings) (E04H 3/00 takes precedence; buildings for two or more purposes, e.g. drive-in buildings E04H 14/00; building construction in general E04B 1/00)

1/005 . . (Modulation co-ordination)

1/02 . . Dwelling houses; Buildings for temporary habitation, [e.g. summer houses] (small erections for limited occupation E04H 1/12; collapsible, erectable or rotatable buildings E04B 1/342)

1/04 . . Apartment houses arranged in two or more levels

1/06 . . Office buildings; Banks (E04H 1/12 takes precedence; furniture or fittings for shops, storehouses or the like A47F)

1/12 . . Small buildings or other erections for limited occupation, erected in the open air or arranged in buildings, e.g. kiosks, waiting shelters for bus stops or for filling stations, roofs for railway platforms, watchmens' huts, dressing cubicles (movable screens as household equipment A47G 5/00)

1/1205 . . . (Small buildings erected in the open air (E04H 1/1272 takes precedence))

1/1211 . . . [Waiting shelters for bus stops]

1/1216 . . . [Public W.C.s]

1/1222 . . . [Sales kiosks]

1/1227 . . . [Traffic control kiosks]

1/1233 . . . [Shelters for filling stations]

1/1238 . . . [Shelters for engines, e.g. electrical meter housings]

1/1244 . . . [Dressing or beach cabins]

1/125 . . . [Small buildings, arranged in other buildings (E04H 1/1272 takes precedence)]

1/1255 . . . [Voting booths]

1/1261 . . . [Cubicles for fire-protection]

1/1266 . . . . Cubicles for dressing; Toilets]

1/1272 . . . [Exhibition stands]

1/1277 . . . [Shelters for decontamination]

2001/1283 . . . (Small buildings of the ISO containers type)

2001/1288 . . . [Sauna cabins]

2001/1294 . . . [Booths for smoking]

1/14 . . . Telephone cabinets

3/00 Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries, prisons (portions of buildings for individual occupation, e.g. cubicles E04H 1/00; structures covering a large free area E04B 1/342)

3/02 . . . Hotels; Motels; Coffee houses; Restaurants; Shops; Department stores (furnishing or fitting A47F)

3/04 . . . Restaurants or shops having arrangements for self-service (paying counters A47F 9/02; furniture or installations specially adapted for supermarkets A47F 10/00; transport aspects B65G; coin-freed apparatus G07F)

3/06 . . . Museums; Library buildings

3/08 . . . Hospitals, infirmaries, or the like; Schools; Prisons

3/10 . . . for meetings, entertainments, or sports

3/12 . . . Tribunes, grandstands or terraces for spectators (or amphitheatres) (auditoriums E04H 3/30; chairs, stools, benches A47C)

3/123 . . . [Telescopic grandstands]
E04H

3/126 . . . [Foldable, retractable or tiltable tribunes (E04H 3/123 takes precedence)]

3/14 . . . Gymnasiums; Other sporting buildings (tribunes E04H 3/12)

2003/142 . . . [with vertically movable or tiltable playing field or sections]
2003/145 . . . [with reconfigurable seating arrangement]
2003/147 . . . [using horizontally movable sections of tribunes]

3/16 . . . for swimming (swimming or splash baths or pools E04H 4/00)

3/165 . . . [having movable parts]

3/22 . . . Theatres; Concert halls; Studios for broadcasting, cinematography, television or similar purposes (drive-in buildings E04H 14/00; equipment for theatres or concert halls A63J [; vehicles specially adapted to carry a theatre or stage B60P 3/025])

3/24 . . . Constructional features of stages

3/26 . . . Revolving stages; Stages able to be lowered (devices for raising or lowering persons A63J 5/12)

3/28 . . . Shiftable or portable platforms

3/30 . . . Constructional features of auditoriums (chairs, stools, benches A47C; building details providing acoustical effects E04B 1/99)

4/00 Swimming or splash baths or pools (wave-producers for baths A47K 3/10; separation B01D; treatment of water C02F; wave-producing pumps F04D 3/50)

4/0006 . . . (Devices for producing waves in swimming pools (generating current of water in swimming pools A63B 69/125))

WARNING:

Group E04H 4/0006 is incomplete pending reclassification of documents from groups B63B 32/00, B63B 32/20, B63B 34/70 and B63B 35/00.

All groups listed in this Warning should be considered in order to perform a complete search.

4/0012 . . . [Floating swimming pools]
4/0018 . . . [Easily movable or transportable swimming pools]
4/0025 . . . [with inflatable parts]
4/0031 . . . [with shell type elements]
4/0037 . . . [Mono-shell type]
4/0043 . . . [mainly made of panels (E04H 4/0031 takes precedence)]
4/005 . . . [characterised by the framework for supporting the panels]
4/0056 . . . [with a framework combined with a water retaining bag]
4/0062 . . . [characterised by stacked planks or staves]
4/0068 . . . [made of plastic shells or plastic elements including at least parts of walls and floors]

4/0075 . . . [made of concrete (E04H 4/0012 takes precedence)]
4/0081 . . . [with walls and floor cast in situ]
4/0087 . . . [with walls prefabricated and floor cast in situ]
4/0093 . . . [with walls and floor prefabricated]
4/06 . . . Safety devices; Coverings for baths
4/065 . . . [Floors adjustable in height]

4/08 . . . Coverings consisting of rigid elements [. e.g. coverings composed of separate or connected elements]
4/082 . . . [composed of flexibly or hingedly-connected slat-like elements, which may or may not be wound-up on a fixed axis (E04H 4/088 takes precedence)]
4/084 . . . [with lifting mechanism]
4/086 . . . [Sliding covers (E04H 4/084 and E04H 4/088 take precedence)]
4/088 . . . [Covers made in concertina folds]
4/09 . . . Coverings of flexible material
4/101 . . . [wound-up on a fixed axis]
4/103 . . . [with inflatable chambers]
4/105 . . . [supported by air pressure under the cover]
4/106 . . . [supported by separate buoyant bodies]
4/108 . . . [supported by frames]
4/12 . . . Devices or arrangements for circulating water [. i.e. devices for removal of polluted water, cleaning baths or for water treatment]
4/1209 . . . [Treatment of water for swimming pools (filters B01D)]
4/1218 . . . [Devices for removal of polluted water; Circumferential gutters]
4/1227 . . . [Circumferential gutters]
4/1236 . . . [Bottom drains]
4/1245 . . . [Recirculating pumps for swimming pool water]
4/1254 . . . [Arm-mounted debris traps or flow diverters]
4/1263 . . . [Floating skimmers]
4/1272 . . . [Skimmers integrated in the pool wall]
4/1281 . . . [Devices for distributing chemical products in the water of swimming pools]
4/129 . . . [Systems for heating the water content of swimming pools (solar collectors using pools F24S 10/17, F24S 10/10; by solar radiation F24S 20/02)]
4/14 . . . Parts, details or accessories not otherwise provided for
4/141 . . . [Coping elements for swimming pools]
4/142 . . . [with fixing means for sealing foil]
4/143 . . . [Swimming lane markers with or without wave suppressors]
4/144 . . . [Means for facilitating access, e.g. step units or slides (invalid-lifting devices for swimming pools A61G 7/1005)]
4/145 . . . [Dividing means for swimming pools, e.g. panels, bulkheads]

2004/146 . . . [Fixing of liners]
2004/147 . . . [the liner edge being held in a slot]
4/148 . . . [Lighting means]
4/16 . . . [specially adapted for cleaning (cleaning devices peculiar to vessels B63B 59/00)]
4/1609 . . . [Hand-held strainers, non-powered brushes or scrubbers]
4/1618 . . . [Hand-held powered cleaners]
4/1627 . . . [Powered gutter cleaners]
4/1636 . . . [Suction cleaners]
4/1645 . . . [Connections to the pool water circulation system]
4/1654 . . . [Self-propelled cleaners]
Buildings or groups of buildings for industrial or agricultural purposes (building construction in general E04B 1/00)

Buildings for parking cars, rolling stock, aircraft, vessels or like vehicles, e.g. garages (tents for use as garages E04H 15/00; bicycle stands B62H; storing of vessels on land B65C 15/00; construction of ground-supported surfaces E01C; marking of parking areas on the ground E01F 9/50; building construction in general E04B 1/00)

Buildings forming part of cooling plants E04H 5/10; building structures for parking vehicles E04H 6/00

Transformer houses; Substations or switchgear houses

Pits or building structures for inspection or services (manhole shafts or other inspection chambers in general E02D 29/12)

Buildings or groups of buildings for agricultural purposes (silos E04H 7/22; manure storage places A01C 3/02; greenhouses A01G 9/14)

Buildings forming part of cooling plants

Cooling towers (towers in general E04H 12/00; cooling equipment F28)

Buildings for parking cars, rolling stock, aircraft, vessels or like vehicles, e.g. garages (tents for use as garages E04H 15/00; bicycle stands B62H; storing of vessels on land B65C 15/00; construction of ground-supported surfaces E01C; marking of parking areas on the ground E01F 9/50; building construction in general E04B 1/00)

Garages for many vehicles

without mechanical means for shifting or lifting vehicles, e.g. with helically-arranged fixed ramps, with movable ramps (E04H 6/26 takes precedence)

with mechanical means for shifting or lifting vehicles

with endless conveyor chains having load-carrying parts moving vertically, e.g. paternoster lifts [also similar transport in which cells are continuously mechanically linked together]

Garages shaped as a wheel or drum rotatable about a horizontal axis

with means for transport in vertical direction only or independently in vertical and horizontal directions (E04H 6/14 takes precedence)

Characterised by the use of conveyor chains or rotatable rollers for horizontal transport

Garages for many vehicles

without mechanical means for shifting or lifting vehicles, e.g. with helically-arranged fixed ramps, with movable ramps (E04H 6/26 takes precedence)

with mechanical means for shifting or lifting vehicles

with endless conveyor chains having load-carrying parts moving vertically, e.g. paternoster lifts [also similar transport in which cells are continuously mechanically linked together]

Garages shaped as a wheel or drum rotatable about a horizontal axis

with means for transport in vertical direction only or independently in vertical and horizontal directions (E04H 6/14 takes precedence)

Characterised by the use of conveyor chains or rotatable rollers for horizontal transport

...
7/00 Construction or assembling of bulk storage containers employing civil engineering techniques in situ or off the site (tower aspects E04H 12/00; storage aspects, e.g. floating roofs, sealing means, filling or discharging means B65D, B65G, F17B, F17C; foundations E02D 27/38)

7/02 . Containers for fluids or gases; Supports therefor (arrangements or adaptations of tanks for water supply E03B 11/00)

7/04 . mainly of metal
7/06 . . . with vertical axis
7/065 . . . . {roof constructions}
7/14 . . . ball-shaped
7/16 . . . with horizontal axis
7/18 . . . mainly of concrete, e.g. reinforced concrete, or other stone-like material
7/20 . . . Prestressed constructions
7/22 . Containers for fluent solids, e.g. silos, bunkers; Supports therefor

2007/225 . . . {Silos with retaining wall type wall elements, e.g. trench silos}

7/24 . . . Constructions, with or without perforated walls, depending on the use of specified materials
7/26 . . . mainly of concrete, e.g. reinforced concrete or other stone-like materials
7/28 . . . composed of special building elements
7/30 . . . mainly of metal
7/32 . . . mainly of wood

9/00 Buildings, or groups of buildings, or shelters adapted to withstand or provide protection against abnormal external influences, e.g. war-like action, earthquake, extreme climate (floatable buildings B65B; foundation aspects E02D; building constructions in general E04B; bearings or like supports allowing movement E04B 1/36; special details in regard to insulation or other protection E04B 1/62; supporting structures for endangered or damaged existing buildings or parts thereof E04G 23/04; doors, windows E06B 5/00; air-conditioning, ventilation F24F; camouflage F41H 3/00; cells or rooms shielded against dangerous radiation G21F 7/00)

9/02 . withstanding earthquake or sinking of ground (foundations E02D 27/34; [making use of active or passive dynamic mass damping systems E04B 1/965])

9/021 . . . {Bearing, supporting or connecting constructions specially adapted for such buildings}
9/022 . . . [and comprising laminated structures of alternating elastomeric and rigid layers]
9/023 . . . [and comprising rolling elements, e.g. balls, pins]
9/024 . . . {Structures with steel columns and beams}
9/025 . . . {Structures with concrete columns}

2009/026 . . . {Anti-seismic devices with hydraulic or pneumatic damping}
E04H

12/223 . . . { with movable anchoring elements; with separately driven anchor rods }
12/2238 . . . { to be placed on the ground (Christmas tree stands A47G 33/12) }
12/2246 . . . { filled with water, sand or the like }
12/2253 . . . { Mounting poles or posts to the holder (E04H 12/2284 takes precedence; break-away mountings E01F 9/631) }
12/2261 . . . { on a flat base (E04H 12/08, E04H 12/10 takes precedence) }
12/2269 . . . { in a socket }
12/2276 . . . { Clamping poles or posts on a stub (E04H 12/2269 takes precedence) }
12/2284 . . . { Means for adjusting the orientation of the post or pole }
12/2292 . . . { Holders used for protection, repair or reinforcement of the post or pole (E04H 12/2276 takes precedence) }
12/24 . . . Cross arms
12/26 . . . Winding-towers for mines (elevators B66B)
12/28 . . . Chimney stacks, e.g. free-standing, or similar ducts (foundations E02D 27/42; chimneys as part of buildings E04F 17/02; connections between furnace and smoke-stack, chimney equipment F23)
12/30 . . . Water-towers (tanks B65D 88/00; use of high-level tanks E03B 11/12)
12/32 . . . Flagpoles (flags, banners, mountings therefor G09F 17/00)
12/34 . . . Arrangements for erecting or lowering towers, masts, poles, chimney stacks, or the like
12/341 . . . { Arrangements for casting in situ concrete towers or the like }
12/342 . . . { Arrangements for stacking tower sections on top of each other (E04H 12/344 takes precedence) }
12/344 . . . { Arrangements for lifting tower sections for placing additional sections under them }
12/345 . . . { Arrangements for tilting up whole structures or sections thereof (E04H 12/347 takes precedence) }
12/347 . . . { Arrangements for setting poles in the ground }
12/348 . . . { Arrangements for demolition towers or the like }

13/00 Monuments; Tombs; Burial vaults; Columbaria, (cisterns, urns A61G 17/00); sculpture or other artistic features B44)
13/001 . . . { Accessories for grave sites, e.g. liners, covers, vault lowering devices (E04H 13/003 takes precedence) }
13/003 . . . { Funeral monuments, grave sites curbing or markers not making part of vaults (E04H 13/008 takes precedence) }
13/005 . . . { Ventilation systems therefor }
13/006 . . . { Columbaria, mausoleum with front access to vaults }
13/008 . . . { Memorials for cremation ashes (E04H 13/006 takes precedence) }

14/00 Buildings for combinations of different purposes not covered in a single previous group of this subclass, e.g. for double purpose (E04H 3/02; E04H 9/06 take precedence); Buildings of the drive-in type

15/00 Tents or canopies, in general
15/001 . . . { Hunting, fishing huts or the like }
15/003 . . . { Bathing or beach cabins }

15/005 . . . { Wind breakers, i.e. fabric stretched between posts anchored in the ground }
15/006 . . . { Tents used as toys }
15/008 . . . { Tents or tent-like constructions composed partially of rigid panels (E04H 15/06 takes precedence; trailer-type vehicles or caravans with foldable or readily disassembled living accommodation comprising flexible elements B60P 3/341) }
15/02 . . . { Tents combined or specially associated with other devices }
15/04 . . . { suspended type, e.g. from trees, from cantilever supports (supporting frames E04H 15/34) }
15/06 . . . { Tents at least partially supported by vehicles }
15/08 . . . { Trailer awnings or the like }
15/10 . . . { Heating, lighting or ventilating (for heating, lighting or ventilating devices per se, see the relevant classes, e.g. F21, F24) }
15/12 . . . { Heating }
15/14 . . . { Ventilating }
15/16 . . . . . of tent roofs
15/18 . . . { Tents having plural sectional covers, e.g. pavilions, vaulted tents, marquees, circus tents (inflatable E04H 15/20); Plural tents, e.g. modular }
15/20 . . . { inflatable, e.g. shaped, strengthened, or supported by fluid pressure (connection of valves to inflatable elastic bodies B60C 29/00); inflatable forms for making walls or the like E04G 11/04) }
15/22 . . . { supported by air pressure inside the tent }
15/24 . . . { cone shaped, e.g. teepees }
15/26 . . . { Centre-pole supported tents (umbrella-type E04H 15/28) }
15/28 . . . { Umbrella type tents }
15/30 . . . { convertible, e.g. from one type to another type tent, from tent to canopy, from tent cover into diverse articles (sacks or packs convertible into tents A45F 4/04; coats or capes convertible into tent coverings A45F 4/14) }
15/32 . . . { Parts, components, construction details, accessories, interior equipment, specially adapted for tents, e.g. guy-line equipment, skirts, thresholds }
15/322 . . . { (Stretching devices) }
15/324 . . . { (Beds constituted by the tent supporting means (beds per se, A47C) } }
15/326 . . . { (Frame members connected by elastic cord) }
15/328 . . . { (Frames kept erected solely by guy lines) }
15/34 . . . { Supporting means, e.g. frames }
15/36 . . . { arch-shaped type (E04H 15/42 takes precedence; arches connected with lazy-tongues E04H 15/505) }

CPC - 2020.02  5
15/38 . . . . expandable, e.g. extensible (in a fan type manner)  
15/40 . . . . . flexible  
15/405 . . . . . (flexible and foldable)  
15/42 . . . . . external type, e.g. frame outside cover  
15/425 . . . . . {Flexible supporting means}  
15/44 . . . . . collapsible, e.g. breakdown type [having connecting nodes] (E04H 15/42 takes precedence; building structures having collapsible parts in general E04B 1/343)  
15/46 . . . . . telescoping and foldable  
15/48 . . . . . foldable, i.e. having pivoted or hinged means ([E04H 15/405 and] E04H 15/46 takes precedence)  
15/50 . . . . . lazy-tongs type  
15/505 . . . . . {characterised by connecting arches with lazy-tongues}  
15/52 . . . . . parallelogram type  
15/54 . . . . . Covers of tents or canopies (ventilated tent roofs E04H 15/16)  
15/56 . . . . . Floors  
15/58 . . . . . Closures; Awnings; Sunshades  
15/60 . . . . . Poles  
15/62 . . . . . Pegs, stakes or the like  
15/64 . . . . . Tent or canopy cover fastenings  
15/642 . . . . . {with covers held by elongated fixing members locking in longitudinal recesses of a frame}  
15/644 . . . . . [the fixing members being a beading]  
15/646 . . . . . {the fixing members being locked by an additional locking member}  
15/648 . . . . . [the longitudinal recesses being made from two clamping members]  
17/00 Fencing, e.g. fences, enclosures, corrals (features peculiar to electrified fences A01K 3/00; H05C; means for allowing passage through fences, barriers, or the like E06B 11/00)  
17/003 . . . . . {Anti-climbing devices, e.g. fixed or rotary spikes]  
2017/006 . . . . . {Caps for posts}  
17/02 . . . . . Wire fencing (E04H 17/14 takes precedence)  
17/04 . . . . . using wire, barbed wire, wire mesh, toothed strips, or the like; Coupling means therefor (wire netting B21F 27/00; other metallic fabrics see the relevant classes; turnbuckles F16G 11/12)  
17/06 . . . . . Parts for wire fences  
17/063 . . . . . {Fence liners; Vegetation prevention barriers}  
17/066 . . . . . {Slats for chain link fences}  
17/08 . . . . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts E04H 12/20; sockets for posts E04H 12/22)  

**NOTE**  
Parts entering the ground are classified in E04H 12/22  

17/10 . . . . . characterised by the way of connecting wire to posts; Droppers  
17/12 . . . . . the wire being placed in slots, grooves, or the like  
17/14 . . . . . Fences constructed of rigid elements, e.g. with posts, with additional wire fillings  
17/1404 . . . . . [using building blocks]  
17/1408 . . . . . [using woven slats]  
17/1413 . . . . . [Post-and-rail fences without vertical cross-members]  
17/1417 . . . . . [Post-and-rail fences with vertical cross-members]  
17/1421 . . . . . [Connections between rail and post]  
17/1426 . . . . . [Picket fences]  
17/143 . . . . . [with separate pickets attached to the side of the horizontal members]  
17/1434 . . . . . [Connections between horizontal members and post]  
17/1439 . . . . . [with separate pickets going through the horizontal members]  
17/1443 . . . . . [Connections between horizontal members and post]  

2017/1447 . . . . . [Details of connections between rails and posts]  
2017/1452 . . . . . [the ends of the rails are fixed on the lateral sides of the posts]  
2017/1456 . . . . . [the ends of the rails being located in vertical channels extending along a substantial portion of the length of the post]  
2017/146 . . . . . [the rails being attached to the front faces of the posts]  
2017/1465 . . . . . [the rails being supported within blind or through holes of the posts]  
2017/1469 . . . . . [Snap connections]  
2017/1473 . . . . . [using fixing devices encircling, partially or fully, the post]  
2017/1478 . . . . . [the posts extending through apertures or cut-outs in the rails]  
2017/1482 . . . . . [the rails being attached to the tops of the posts]  
2017/1486 . . . . . [the rails being positioned between the uprights of double posts]  
2017/1491 . . . . . [Hinged connections between rails and posts]  
2017/1495 . . . . . [Fences with pivotable slats for reduced wind resistance or for adjusting visibility]  
17/16 . . . . . using prefabricated panel-like elements, e.g. wired frames  
17/161 . . . . . [using wired panels without frame]  
17/163 . . . . . [using wired panels with frame]  
17/165 . . . . . [using panels with frame (E04H 17/163 takes precedence)]  
17/166 . . . . . [with cross-members]  
17/168 . . . . . [using panels without frames and fitted in grooves of posts]  
17/18 . . . . . Corrals, i.e. easily transportable or demountable enclosures  
17/20 . . . . . Posts therefor  
17/22 . . . . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts E04H 12/20; sockets for posts E04H 12/22)  

**NOTE**  
Parts entering the ground are classified in E04H 12/22  

17/24 . . . . . Connections for attaching additional wire to frames, posts or railings  
17/26 . . . . . Devices for erecting or removing fences [hand-operated hammers having the impact head in form of a sleeve slidable on a shaft B25D 1/16]  
17/261 . . . . . [for post and wire handling]  
17/263 . . . . . [for erecting posts (pile driving E02D 7/00)]
E04H

17/265 . . . {for removing posts}
17/266 . . . {for stretching or winding wire or wire mesh}
17/268 . . . {Hand tools for wiring fences, e.g. tying or splicing tools (E04H 17/266 takes precedence)}