

## E01F

### **ADDITIONAL WORK, SUCH AS EQUIPPING ROADS OR THE CONSTRUCTION OF PLATFORMS, HELICOPTER LANDING STAGES, SIGNS, SNOW FENCES, OR THE LIKE**

#### **Definition statement**

*This subclass/group covers:*

Additional equipment for roads or railways, including platforms, refuge islands, drainage means of the sub-base of roads or ballastway of railways, arrangements protecting against snow or landslides, arrangements against traffic noise.

Landing stages for helicopters.

Arrangements for facilitating the use of roads, including road signs, traffic signals, arrangement for enforcing caution, arrangements for obstructing or restricting traffic, safety arrangements for errant vehicles or against vehicular impact.

#### **Relationship between large subject matter areas**

The structure and construction of railways and roads as such is covered by the respective subclasses [E01B](#) and [E01C](#).

Ground installations for aircraft in general are covered by the subclass [B64F](#).

Systems for traffic control or monitoring are covered by the subclass [G08G](#).

Displaying and advertising signs are covered by the subclass [G09F](#).

## E01F 1/00

**Construction of [N: station or like] platforms or refuge islands [N: or like islands in traffic areas, e.g. intersection or filling-station islands] (general arrangement [N: of filling stations B60S5/02,] of railway platforms [N: B61B1/02, of traffic-channelling island at intersections E01C1/02])[N: ; Kerbs specially adapted for islands in traffic areas (specially adapted for guiding, marking or signalling E01F9/0533, for illumination E01F9/0536; lane separators diverting traffic past safety zones E01F9/087 )]**

#### **Definition statement**

*This subclass/group covers:*

Platforms for e.g. railway or bus stations.

Refuge islands in traffic areas and kerbs specially adapted for such islands.

Filling station islands.

Portable or retractable platforms for traffic officers.

### References relevant to classification in this group

*This subclass/group does not cover:*

General arrangement of filling stations	<a href="#">B60S 5/02</a>
General arrangement of railway stations and platforms	<a href="#">B61B 1/02</a>
Horizontal loading or unloading platforms	<a href="#">B65G 69/22</a>
Traffic islands in roads	<a href="#">E01C 1/02</a>
Kerbs informing road users	<a href="#">E01F 9/053</a>
Traffic lane delineators	<a href="#">E01F 9/087</a>
Waiting shelters for bus stops	<a href="#">E04H 1/1211</a>

### E01F 3/00

**Landing stages for helicopters, e.g. located above buildings (layout of airfields B64F; buildings or like structures for special purposes E04H)**

#### Definition statement

*This subclass/group covers:*

Landing stages for helicopters located on the ground, over the water surface or above buildings

### References relevant to classification in this group

*This subclass/group does not cover:*

Layout of airfields	<a href="#">B64F 1/00</a>
Paving of take-off areas for vertically starting aircraft	<a href="#">E01C 9/008</a>

Buildings for storing aircraft	<a href="#">E04H 6/44</a>
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## E01F 5/00

**Draining the sub-base [N: i.e. subgrade or ground-work, e.g. embankment] of roads or [N: of the] ballastway of railways [N: or draining-off road surface or ballastway drainage] by trenches, culverts, or conduits [N: or other specially adapted means] ([N: drainage of the ballastway of railways E01B11/00; surface drainage of roads E01C11/224; drainage of soil E02B11/00 ;] underground drainage E02D; conduits for sewerage E03F)**

### Definition statement

*This subclass/group covers:*

Draining of the road foundation, which includes the road sub-base and subgrade or ground work (e.g. embankment), and draining of the ballastway of railways by using trenches, culverts, conduits or other specially adapted means.

Culverts, head structures for culverts or for drainage conduit outlets in slopes.

### References relevant to classification in this group

*This subclass/group does not cover:*

Drainage of the ballastway of railways in general	<a href="#">E01B 1/00</a>
Surface drainage of roads	<a href="#">E01C 11/224</a>
Drainage of soil	<a href="#">E02B 11/00</a>
Underground drainage	<a href="#">E02D</a>
Conduits for sewerage	<a href="#">E03F</a>
Underground siphons	<a href="#">E02D 29/08</a>
Tunnels or galleries	<a href="#">E21D</a>
Pipes in general	<a href="#">F16L</a>

## E01F 7/00

**Devices affording protection against snow, sand drifts, side-wind effects, snowslides, avalanches or falling rocks; (permanently installed heating or blowing devices for roads E01C11/26); Anti-dazzle arrangements [N:; Sight-screens for roads, e.g. to mask accident site (E01F8/00 takes precedence)]**

### Definition statement

*This subclass/group covers:*

Snow fences, sand fences.

Devices specially adapted for protecting against wind, e.g. screens, deflectors or attenuators at tunnel or lock entrances.

Devices affording protection against snowslides, avalanches or falling rocks, e.g. avalanche preventing structures, galleries, nets, rock traps.

### References relevant to classification in this group

*This subclass/group does not cover:*

Protecting plants	<a href="#">A01G 13/00</a>
Crash barriers with nets	<a href="#">E01F 15/06</a>
Securing signs to safety barriers	<a href="#">E01F 9/03</a>
Securing of slopes or inclines	<a href="#">E02D 17/00</a>
Snow traps for roofs	<a href="#">E04D 13/10</a>
Screens for beach use	<a href="#">E04H 15/00</a>
Fences in general	<a href="#">E04H 17/00</a>

## E01F 8/00

**Arrangements for absorbing or reflecting air-transmitted noise from road or railway traffic (ground installations for reducing aircraft noise B64F1/26; general building constructions for absorbing or reflecting noise, noise**

## absorption or reflection for buildings E04B1/74 )

### Definition statement

*This subclass/group covers:*

Wall type noise barriers.

Arrangements including constructions for generation of phase shifting.

Noise barriers specially adapted for sustaining vegetation or for accommodating plants.

Embankment-type or crib-type noise barriers.

Retaining walls specially adapted to absorb or reflect noise.

### References relevant to classification in this group

*This subclass/group does not cover:*

Receptacles for cultivation of plants	<a href="#">A01G 9/02</a>
Ground installations for reducing aircraft noise	<a href="#">B64F 1/26</a>
Securing slopes or inclines	<a href="#">E02D 17/20</a>
Retaining or protecting walls	<a href="#">E02D 29/02</a>
General building constructions for absorbing or reflecting noise, noise absorption or reflection for buildings	<a href="#">E04B 1/74</a>
Building elements for planting walls	<a href="#">E04C 1/395</a>
Solar cells specially adapted to be used in motorway sound barriers	<a href="#">H01L 31/0426</a>

## E01F 9/00

Arrangement of road signs or traffic signals (signals, signalling systems G08; signs, attachment thereof to supports G09F); Arrangements for enforcing caution, e.g. speed bumps

### Definition statement

*This subclass/group covers:*

Traffic guidance, warning or control posts or bollards, delineator posts, milestones.

Supports for signs or signals, e.g. posts, frames, gantries.

Free-standing signs or signals, e.g. traffic cones, foldable or inflatable devices.

Devices intended to be readily removable, e.g. for insertion into road-stud sockets.

Storing, transporting, placing or retrieving portable devices.

Arrangements for fastening signs or signals to safety barriers or the like.

Road surface markings, also including methods of forming, installing or applying markings in, on or to paving.

Kerbs or road edgings specially adapted for informing road users, e.g. illuminated.

Arrangements specially adapted for audible or vibrational signalling, e.g. rumble strips, or for enforcing reduced speed, e.g. speed bumps.

Traffic studs, marking blocks, also including methods of forming or installing same in or on the road surface.

Traffic lines, lane delineators for discouraging but not preventing crossing, movable traffic lines for repeated use at different locations.

## References relevant to classification in this group

*This subclass/group does not cover:*

Markings specially adapted for playing grounds	<a href="#">A63C 19/06</a>
Portable emergency signal devices on board vehicles, e.g. warning triangles	<a href="#">B60Q 7/00</a>
Reflecting or signal paints	<a href="#">C09D 5/004</a>
Devices for applying prefabricated markings on finished paving	<a href="#">E01C 23/18</a>
Barrier bollards	<a href="#">E01F 13/00</a>
Buffer bollards	<a href="#">E01F 15/003</a>
Posts or poles in general	<a href="#">E04H 12/00</a>

Post holders to be placed on the ground in general	<a href="#">E04H 12/2238</a>
Boundary markers in general	<a href="#">G01C 15/04</a>
Portable traffic signalling devices	<a href="#">G08B 5/006</a>
Means for attaching signs to a supporting structure in general	<a href="#">G09F 7/18</a>
Adjustably mounting of signs in general	<a href="#">G09F 7/20</a>
Rotatably or swingably mounting of signs in general	<a href="#">G09F 7/22</a>

## E01F 11/00

**[N: Road engineering aspects of] Embedding pads or other sensitive devices in paving or other road surfaces [N: e.g. traffic detectors, vehicle-operated pressure-sensitive actuators, devices for monitoring atmospheric or road conditions] (pressure-sensitive elements G01L; traffic control systems G08G)**

### Definition statement

*This subclass/group covers:*

Road engineering aspects of embedding pads or other sensitive devices in paving or other road surfaces, e.g. traffic detectors, vehicle-operated pressure-sensitive actuators, devices for monitoring atmospheric or road conditions.

### References relevant to classification in this group

*This subclass/group does not cover:*

Pressure-sensitive elements as such	<a href="#">G01L</a>
Traffic control systems	<a href="#">G08G</a>

## E01F 13/00

**Arrangements for obstructing or restricting traffic, e.g. gates, barricades (for railway crossings B61L); [N: Preventing passage of vehicles of selected category or dimensions (E01F13/12, E01F13/126 take precedence)]**

**Definition statement**

*This subclass/group covers:*

Portable barriers, pedestrian barriers, barriers for channelling or controlling crowds

Removable barriers with permanently installed base members.

Barriers with flexible members, e.g. cords

Devices movable to allow or prevent passage, with obstructing members situated on, flush with, or below the traffic surface, e.g. with inflatable members on the surface

Devices with obstructing members moving in translatory motion, e.g. telescopic barriers posts, or with members moving by swinging them into a given position, e.g. swinging gates, tiltable sections of the road surface, tiltable posts.

Vehicle barriers adapted for allowing passage in one direction only

Arrangements for forcibly arresting or disabling vehicles, e.g. spiked mats.

**References relevant to classification in this group**

*This subclass/group does not cover:*

Safety means for railroad crossing traffic, e.g. gates for level crossings	<a href="#">B61L 29/00</a>
Portable signs co-operating with permanent base	<a href="#">E01F 9/013</a>
Retractable speed humps	<a href="#">E01F 9/047</a>
Corrals	<a href="#">E04H 17/18</a>
Gates or doors for allowing passage through fences, barriers or the like	<a href="#">E06B 11/02</a>

**E01F 15/00**

**Safety arrangements for slowing, redirecting or stopping errant vehicles, e.g. guard posts or bollards; Arrangements for reducing damage to roadside structures due to vehicular impact (arrangements for fastening signs or signals to safety barriers or the like E01F9/03; for forcibly arresting vehicles E01F13/00; [N: guard barriers on road-bridges E01D19/103; fences in general E04H17/00 ])**

### **Definition statement**

*This subclass/group covers:*

Individual devices arranged in spaced relationship, e.g. buffer bollards.

Continuous barriers extending along roads or between traffic lanes, including barriers essentially made of longitudinal beams or rigid strips, essentially made of cables, nettings or the like, essentially made of walls or wall-like elements.

Movable lane separating barriers, e.g. shiftable barriers.

Arrangements specially adapted for local protection, e.g. for bridge piers, for traffic islands.

### **References relevant to classification in this group**

*This subclass/group does not cover:*

Guard barriers on road-bridges	<a href="#">E01D 19/103</a>
Arrangements for forcibly arresting vehicles	<a href="#">E01F 13/12</a>
Fencing in general	<a href="#">E04H 17/00</a>