

TRAFFIC CONTROL EQUIPMENT - WARNING AND SAFETY LIGHT DEVICES

SCOPE AND APPLICATIONS

THIS EUROPEAN STANDARD SPECIFIES THE REQUIREMENTS FOR INDIVIDUAL ELECTRICALLY OPERATED LIGHT DEVICES, CALLED WARNING LIGHTS, EMITTING A CONTINUOUS OR REGULAR INTERMITTENT LIGHT OF A SINGLE COLOUR WHICH, BY THEIR COLOUR AND POSITION ALONE, ARE USED TO WARN, INFORM OR GUIDE ROAD USERS. IT SPECIFIES THE REQUIREMENTS FOR VISUAL, STRUCTURAL AND OPERATIONAL PERFORMANCE AND THE RELEVANT TEST METHODS TO BE USED.

THIS EUROPEAN STANDARD IS NOT APPLICABLE TO LIGHTING DEVICES, WHICH CONVEY MESSAGES BY ADDITIONAL MEANS (E.G. VARIABLE

MESSAGE SIGNS) OR WHICH CONVEY A MANDATORY INSTRUCTION (E.G. TRAFFIC SIGNALS) OR WHICH ARE COVERED BY VEHICLE LIGHTING REGULATIONS.

BELOW YOU WILL FIND A TABLE WITH THE MOST RELEVANT CLASSES OF THE NORM THAT COVERS MOST OF THE APPLICATIONS, PERMANENT OR TEMPORARY, USED IN THE EUROPEAN UNION.

IN THE NEXT PAGE WE PRESENT A GUIDE THAT CAN HELP CHOOSING THE PROPER LED LIGHT IN DIFFERENT SITUATIONS.

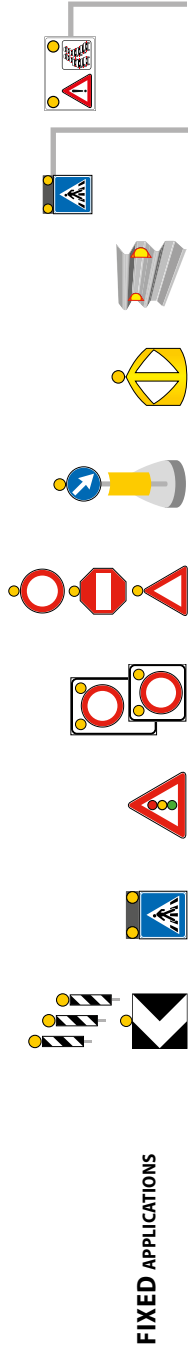
THIS GUIDE IS NOT AN OFFICIAL TRANSCRIPTION OF THE NORM BUT IT IS TO BE CONSIDERED A RECOMMENDATION BASED ON OUR EXPERIENCE AND THE OFFICIAL TRANSCRIPTIONS OF SOME COUNTRIES OF THE EUROPEAN UNION.

LUMINOUS INTENSITY - RELEVANT CLASSES

| CLASS | AREA OF LIGHT EMITTING SURFACE [CM ²] | MIN. DIAMETER OF LIGHT EMISSION [MM] | RANGE OF ANGLES | | LUMINOUS INTENSITY (DAY) | | LUMINOUS INTENSITY (NIGHT) |
|-------|---|--------------------------------------|-----------------|-----------------|--------------------------|-----------|----------------------------|
| | | | HORIZONTAL | VERTICAL | MIN. [CD] | MAX. [CD] | |
| L2H | ≥18 | 48 | +7° ... -7° | +5° ... -5° | 150 | 1500 | DIM TO 35 % |
| L6 | ≥2X250 | 178.5 | +10° ... -10° | +5° ... -5° | 10 | 100 | 35 % |
| L7 | ≥250 | 178.5 | +10° ... -10° | +5° ... -5° | 20 | 100 | 35 % |
| L8G | ≥250 | 178.5 | +7.5° ... -7.5° | +5° ... -5° | 25 | 100 | 35 % |
| L8M | ≥250 | 178.5 | +7.5° ... -7.5° | +5° ... -5° | 500 | 1500 | 35 % |
| L8H | ≥250 | 178.5 | +7.5° ... -7.5° | +5° ... -5° | 1500 | 5000 | 35 % |
| L9M | ≥700 | 298.6 | +1.5° ... -1.5° | +1.5° ... -1.5° | 2000 | 8000 | 35 % |
| L9H | ≥700 | 298.6 | +1.5° ... -1.5° | +1.5° ... -1.5° | 20000 | 40000 | 35 % |

EN 12352 CLASSES

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FIXED APPLICATIONS

| | | | | | | | | | | |
|------------------|------------|------------------------|------------|------------|------------|------------------------|------------|------------------------|------------------------|------------|
| CLASS | L8M L8H | L2H L8M | L8M L8H | L2H L8M | L2H L8M | L2H L8M | L8M L8H | L2H L8M | L8M L8H | L8M L8H |
| LED LIGHT | BASIC 200 | BASIC 102 BASIC 201 | BASIC 201 | BASIC 200 | BASIC 200 | BASIC 200 BASIC 201 | BASIC 201 | BASIC 200 BASIC 201 | BASIC 200 BASIC 201 | BASIC 201 |
| CLASS | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H | L8M L8H |
| LED LIGHT | BASIC 200 | BASIC 201 | BASIC 201 | BASIC 200 | BASIC 200 | BASIC 200 BASIC 201 | BASIC 201 | BASIC 200 BASIC 201 | BASIC 200 BASIC 201 | BASIC 201 |
| CLASS | L9M L9H | | L9M L9H | L9M L9H | L9M L9H | L9M L9H | L9M L9H | L9M L9H | L9M L9H | L9M L9H |
| LED LIGHT | BASIC 302 | | BASIC 304 | BASIC 302 | BASIC 302 | BASIC 302 | BASIC 302 | BASIC 302 | BASIC 302 | BASIC 304 |

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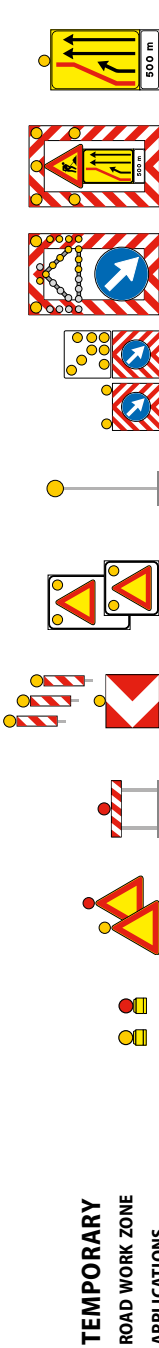
URBAN ROADS

70

SECONDARY ROADS

100

MAIN ROADS AND MOTORWAYS



TEMPORARY ROAD WORK ZONE APPLICATIONS

| | | | | | | | | | | |
|------------------|------------------|---------------------|----------|------------|------------|------------|------------|------------|------------|------------|
| CLASS | L6 L7 | L6 L7 | L6 L7 | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M |
| LED LIGHT | D-STAR | D-STAR | D-STAR | BASIC 210 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 |
| CLASS | L6 L7 L8G* | L6 L7 L8G/M* | L6 L7 | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M |
| LED LIGHT | D-STAR | D-STAR BASIC 210 | D-STAR | BASIC 210 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 |
| CLASS | L6 L7 L8G* | L6 L7 L8G/M* | L6 L7 | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M | L8H L8M |
| LED LIGHT | D-STAR | D-STAR BASIC 210 | D-STAR | BASIC 210 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 | BASIC 210 | BASIC 211 |

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URBAN ROADS

70

SECONDARY ROADS

100

MAIN ROADS AND MOTORWAYS

* ONLY YELLOW