

**ESWATINI NATIONAL STANDARD**

**Vehicle Standards – Specification for Vehicle Number Plates –  
Aluminium**

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PUBLIC REVIEW DRAFT

**Table of changes**

Clause Changed	Date	Change

**NATIONAL FOREWORD**

This Eswatini National Public Review Draft Standard was prepared by Technical Committee *SWASA/TC 17 Road Vehicles* in accordance with procedures of the Eswatini Standards Authority, in compliance with Annex 3 of the WTO/TBT Agreement.

PUBLIC REVIEW DRAFT

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## **0 Introduction**

### **0.1 Purpose**

This specification has been prepared to provide requirements for number plates for vehicles.

### **0.2 Principles and background information**

The principles incorporated in this specification are to focus on items which are likely to be possible to harmonise across a wide range of countries so as to encourage and facilitate harmonisation in order to minimise costs rather than to attempt to standardize on the identification of country.

The number plates covered in this draft are limited to aluminium blanks, number plate sizes, reflective material quality and various tests to ensure a reasonable durability and good legibility of the alpha numeric characters by human eye and by automatic number plate recognition (ANPR). It is vital that the character style used is constant throughout the regions.

It is understood that the painting versions of number plates and the plastic types of number plates are more likely to suffer reduction in quality or deviation from a standard than the type specified in this standard.

Opportunities to standardize on sizes to enhance the possibility of international trade appear to be evident from the large number of variations currently in use in Africa and globally – see list for discussion and illustration of the need to harmonise in the Bibliography.

Acknowledgement is given to the following publications for the assistance derived from them:

- a) The South African Bureau of Standards - SANS 1116 – Retro-reflective number plates for motor vehicles - Parts 1 and 2: 2016
- b) The Malawi Bureau of Standards DMS 639-1:2011 – Draft Malawi Standard – Retro reflective registration plates for motor vehicles – Specification Part 1: Blank Plates (Aluminium)
- c) The Zambia Bureau of Standards ZS 266: 2017 – Reflex-Reflecting vehicle number plates – Specification
- d) International Standard ISO 7591, Road vehicles – Retro-reflective registration plates for motor vehicles and trailers

## Vehicle Standards – Specification for Vehicle Number Plates – Aluminium

### 1 Scope

This standard specifies the requirements for the materials, sizes and retro-reflectivity of aluminium number plates, including tests for reflective performance, longevity and durability. The type and size of number plates and characters to be embossed on number plates for countries using Latin alphabet characters and Arabic numeral characters are also specified.

The size of number plates and characters for countries using Arabic alphabet characters as well as painted metal or plastic types of number plates are out of scope for this standard.

### 2 Normative references

ASTM G154: Standard practice for operating fluorescent ultraviolet (UV) lamp apparatus for exposure of non-metallic materials

*CIE 15: Colorimetry, 3 Edition*

*CIE 54.2: Retro-reflection – Definition and measurement*

*ISO 7591: Road vehicles – Retro reflective registration plates for motor vehicles and trailers*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

#### 3.1 Definitions

##### 3.1.1 background graphic

Graphic is in the background and the alpha numerics are on top of the graphic

##### 3.1.2 blank

Number plate in its raw state before it has been processed and completed to become a number plate for attachment to a vehicle

##### 3.1.3 chromaticity

Objective specification of the quality of a colour

##### 3.1.4 embossing

process to provide a border, a character or a set of characters applied to the blank in relief on the retroreflective side of a number plate



### **3.1.5 face**

surface of the number plate which would face the reader

### **3.1.6 graphic**

pictorial image that is contained under the topcoat of the reflective sheeting such that the alpha numerics may be positioned over the image, or positioned to either one or to both sides of the image

### **3.1.7 non-background graphic**

graphic and the alpha numerics are on the same level

### **3.1.8 number plate**

plate that is intended to show the embossed number (registration number or licence number, as the case may be) assigned to the vehicle to which it is attached

### **3.1.9 retro-reflective**

light is reflected predominantly back towards its source

### **3.1.10 UN country sign**

Distinguishing Sign for the country communicated to the Secretary General of the United Nations in accordance with the UN Conventions on Road Traffic, comprised of 1, 2 or 3 capital Latin alpha characters

## **3.2 Abbreviations**

For the purpose of this standard, the following abbreviations apply.

**ANPR** Automatic Number Plate Recognition

**ASTM** ASTM International, formerly known as American Society for Testing and Materials

**CIE** International Commission on Illumination

**UN** United Nations

## 4 Requirements

### 4.1 Blank material and dimensions

- a) The blank shall be of aluminum, free from unevenness, hard spots, hollows, holes, and any blemishes or other deficiencies likely to cause problems during further manufacturing processes.
- b) The blank shall be of even thickness of not less than 0,9mm, free from sharp edges and burrs and be dimensioned according to one of the following sizes with a tolerance of  $\pm 2$ mm on each dimension and the corners shall be rounded to a radius of  $15\text{mm} \pm 3\text{mm}$ :
  - i) 520mm x 113mm
  - ii) 440 mm x 120mm
  - iii) 250mm x 205mm
  - iv) 305mm x 165mm
- c) No more than two types shall be made available:
  - i) Type A, where the retro-reflective material covers the whole face, or
  - ii) Type B, where the retro-reflective material covers only the entire area inside of the embossed border.

### 4.2 Retro-reflective and colour characteristics

#### 4.2.1 General

- a) The retro-reflective material shall be applied in such a manner as to provide a flat and smooth surface and form a durable bond with the substrate and yet to resist impacts and bending.
- b) The material shall be able to be embossed and to a minimum height of 1mm to form letters and digits in relief.
- c) The retro-reflective material shall also bear the following markings:
  - i) The national flag 26 mm in height and 39 mm in width positioned as specified in Annex A;
  - ii) The country name in capital Latin characters using Arial font not exceeding size 24 Bold (not exceeding 6 mm in height and 40 mm in width) and positioned as specified in Annex A;
  - iii) The UN country sign as specified in Annex D in capital Latin characters using Arial font not exceeding size 48 Black (not exceeding 12 mm in height and 40 mm in width) and positioned as specified in Annex A; and
  - iv) A serial number and production batch identification for reference purposes as specified in 7.

d) A security decal specified in Annex C shall be affixed to the retro-reflective material, positioned as specified in 7

e) The markings and the security decal shall be centred in a vertical banner aligned with the left vertical edge of the plate as specified in Annex A, the width of which shall not exceed  $57 \pm 1$  mm from the edge of the plate. The national flag shall be positioned at least  $17 \pm 1$  mm from the top horizontal edge of the plate. The vertical distance between each of the markings and the security decal shall be at least 3 mm but not more than 10 mm as permitted by the vertical dimensions of the particular plate, provided that the positioning of the markings on the 250mm x 165mm plate shall allow for an embossed character with height of  $60 \pm 2$  mm below the banner to accommodate the second row of 5 characters specified in 4.4.3.

#### 4.2.2 Colour and luminance factor (without graphics)

a) The colour of the retro-reflective material shall be white.

b) When the colour and luminance factors are measured on samples without graphics applied to the substrate using a spectrophotometer (or other equally suitable colour measuring device) in accordance with CIE 15 and using standard illuminant D65 and 45/0 geometry:

i) The chromaticity co-ordinates shall lie within the area of the chromaticity diagram defined by the values in Table 1 for the colour yellow or white as appropriate.

ii) The luminance factor shall be at least the value in Table 1 for yellow or white as appropriate.

iii) The ratio of the luminance factor values between the border colour and the adjacent retro-reflective background colour, shall not be less than 5 to 1.

**Table 1: Chromaticity co-ordinates and luminance factors (by day)**

Colour	Coordinate	Value of Coordinate				Minimum Luminance Factor
		1	2	3	4	
White	X	0.355	0.305	0.285	0.335	0.35
	Y	0.355	0.305	0.325	0.375	

### 4.2.3 Colour and luminance factor with graphics

- a) The colour of the retro-reflective material shall be white with graphics.
- b) The graphics on the retro-reflective material shall not exceed 4 colours and shall be of such a design that the graphics cannot be mistaken for a letter or numeral.
- c) Any graphic which is not a “background graphic” shall not exceed a width of 65mm and a height of 75mm.
- d) When the colour and luminance are measured on samples with graphics applied to the substrate using a spectrophotometer (or other equally suitable colour measuring device) in accordance with CIE 15 and using standard illuminate D65 and 45/0 geometry:
  - i) The luminance factors of the colours black, blue, brown, green or red as available on areas of 70mm x 50mm that may affect legibility shall not exceed 0.07
  - ii) The ratio of the luminance factor values between the border colour and the adjacent retroreflective background and the between the border colour and adjacent graphic background colour shall not be less than 5 to 1.

### 4.2.4 Coefficients of retro-reflection

- a) When the coefficients of retro-reflection are measured in accordance with CIE 54.2 using the observation and entrance angle values given in Table 2 and the results are recorded in  $\text{cd}/(\text{lx}\cdot\text{m}^2)$ :
  - i) In the case of a blank with no graphics the coefficient of retro-reflection shall be at least equal to the values in Table 2.
  - ii) In the case of a blank with graphics that has first been divided into 3 equal sections the total retro-reflection of the three sections shall be at least equal to the values in Table 2.

**Table 2: Coefficients of retro-reflection**

Observation Angle (degrees)	Entrance Angle (degrees)	Minimum coefficient of retro-reflection when measured with standard illuminant A ( $\text{cd}/(\text{lx}\cdot\text{m}^2)$ )	
		Graphic <sup>b</sup>	White
0.33 <sup>a</sup>	5 <sup>a</sup>	35	50
1.5	30	1.5	2.0

a The coefficient of retro-reflection at an angle of observation and an entrance angle of 0.33 and 5 degrees respectively shall not exceed  $100\text{cd}/(\text{lx}\cdot\text{m}^2)$  for yellow material and  $160\text{cd}/(\text{lx}\cdot\text{m}^2)$  for white material.

b The total retro-reflection per unit area of a full number plate, including graphics without characters printed on white retro-reflective material.

#### **4.2.5 Certification of compliance of retro-reflective material**

- a) To avoid unnecessary testing, test costs and associated delays in ensuring acceptability of materials, the test results from laboratories accredited to ISO 17025 to perform the above tests shall be accepted by all laboratories which are members of the ILAC and APEC peer review systems.
- b) All outlets that have been approved and authorized to participate in the manufacturing or embossing of number plates shall hold copies of such test reports which relate to the reflective material types and batches they have purchased.

### **4.3 General characteristics**

#### **4.3.1 National legislation and conditioning**

- a) The plates shall comply with all aspects of national legislation and regional agreements or legislation.
- b) For standardised testing conditions despite different national climatic conditions, all samples for test and inspection shall first be conditioned for at least 24h at  $23 \pm 5^{\circ}\text{C}$  and  $50 \pm 10\%$  relative humidity before all tests and inspections.

#### **4.3.2 Border**

- a) The border shall be embossed around the periphery of the blank to a height above the retroreflective surface of not less than 0.4mm nor more than 2mm.
- b) The border shall be black, blue, brown, green or red, corresponding to the colour of the embossed characters specified in 4.4.
- c) The luminance factor of the colors black, blue, red, green or brown determined in accordance with
  - i) Shall not exceed 0,07.

#### **4.3.3 Temperature resistance and weathering**

- a) When a test sample is subjected to the conditions in b) i) and ii) in sequence, the reflective material and the letters and digits shall show no sign of peeling off the substrate, no cracking, blistering or appreciable discoloration.
- b) The plate is installed with the test surface facing the lamps, and subject it to artificial weathering using the apparatus and method given in ASTM G154 for 240h, using a cycle of:
  - i) 4h UV exposure at  $60^{\circ}\text{C}$ , and then
  - ii) 4h condensation exposure at  $50^{\circ}\text{C}$ .

- c) An alternative cycle is recommended in compliance with ISO 7591:
- i) 7h consecutively at a temperature of  $65 \pm 2^{\circ}\text{C}$  with a relative humidity of  $10 \pm 5\%$
  - ii) 1h at a temperature of  $23 \pm 5^{\circ}\text{C}$  and  $50 \pm 10\%$  relative humidity
  - iii) 15h consecutively at a temperature of  $-20^{\circ}\text{C}$

#### **4.3.4 Adhesion to the substrate**

After conditioning a test sample for 1h at  $-20^{\circ}\text{C}$  and immediately taking the sample out of the cold store it shall not be possible to remove the retro-reflective material physically in one piece from the substrate at the adhesive/plate interface.

#### **4.3.5 Impact resistance**

After conditioning the test sample for 1h at  $-20^{\circ}\text{C}$  and immediately taking the sample out of the cold store, place the sample face upwards on a steel plate of minimum thickness 12mm and allow a steel ball of 25mm diameter to drop from a height of 2m onto a flat section of the sample then examine the retro-reflective material to ensure there is no sign of cracking or separation from the substrate outside a distance of 5mm from the impacted area.

#### **4.3.6 Bending resistance**

After conditioning the material as specified in 4.3.1 facilitate bending by cutting any embossed border from the top and bottom of the test plate then bend the flat area around a mandrel of 50mm diameter to an included angle of  $90^{\circ}$  with the reflective material facing outwards there shall be no sign of cracking.

#### **4.3.7 Water resistance**

After having immersed the test plate in de-ionized water for 24h consecutively at  $23 \pm 5^{\circ}\text{C}$  and having allowed it to dry for 48h at normal room temperature there shall be no sign of deterioration that could impair its longevity or performance.

#### **4.3.8 Cleanability**

After smearing the face with a mixture of lubrication oil and graphite ensure that it can be cleaned off easily without damage to the reflective surface when wiped with a mild aliphatic solvent such as heptane, followed by washing with a neutral detergent.

### **4.3.9 Resistance to fuel**

After immersion of a portion of a plate, including letters and numerals in a test fuel of 70% n-heptane and 30% toluol (by volume) for 1 minute there shall be no sign of deterioration that could impair its longevity or performance.

### **4.3.10 Resistance to abrasion**

Various test procedures have been developed using brushes with stiff bristles, amongst others of a brush with stiff, black, butt-cut Chinese hog bristles securely wired into an aluminium brush block and a suitable drawing mechanism that does not exert a vertical force on the brush while allowing the brush to be moved back and forth over the test specimen while a supply of cleaning solution is so arranged as to drip onto the specimen as shown in Figure 4. There shall be no sign of penetration of the coating on the surfaces of the characters to the substrate that would affect the functionality of the number plate.

## **4.4 4.4 Requirements for alphanumeric characters**

### **4.4.1 General**

- a) The number, height, form, spacing and dimensions of the characters shall be as prescribed in 4.4.2 for 75 mm high characters, and 4.4.3 for 60 mm high characters and they shall be of the shape, style and appearance as shown in Figure 1.
- b) The embossed characters shall be black, blue, brown, green or red.
- c) The luminance factor of the colours black, blue, red, green or brown determined in accordance with i) Shall not exceed 0,07.

### **4.4.2 Characters of a nominal height 75mm**

- a) The characters shall be of height 75 mm  $\pm$  2 mm and shall have shapes that conform to those of the appropriate characters given in Figure 1;
- b) Not more than nine characters shall appear in one line on a number plate of size 520 mm  $\times$  113 mm ( $\pm$  2 mm);
- c) Not more than eight characters shall appear in one line on a number plate of size 440 mm  $\times$  120 mm ( $\pm$  2 mm);
- d) Not more than nine characters shall appear in two lines on a number plate of size 250 mm  $\times$  205 mm ( $\pm$  2 mm); and

e) In the case of a number plate bearing a single row of characters including six numerals, there shall be a dash of length between 10 mm and 25 mm  $\pm$  2 mm and a width of 10 mm  $\pm$  2 mm between the third and fourth numerals.

#### **4.4.3 Characters of a nominal height of 60mm**

a) The characters shall be of height 60 mm  $\pm$  2 mm and shall have shapes that conform to those of the appropriate characters given in Figure 2;

b) Not more than nine characters shall appear in two lines on a number plate of size 250 mm  $\times$  165 mm ( $\pm$  2 mm).

#### **4.4.4 Layout of the characters**

a) Characters shall not encroach on a non-background graphic image;

b) The width of spaces between outside edges of the number plate and the first and last character shall be not less than 15 mm;

c) The width of spaces between rows of characters on a number plate that bears a double row of characters shall be 10 mm  $\pm$  1 mm;

d) The width of spaces that separate adjacent groups of letters and numerals shall be a minimum of 10 mm; and

e) The width of spaces between adjacent letters in groups of letters, and the width of spaces between adjacent numbers in groups of numbers shall be equal, subject to a tolerance of  $\pm$  1 mm.

f) The spacing of characters and numerals on personalized number plates shall comply with the requirements specified by the relevant standards organisation or government department which licences the production of number plates provided that the characters are symmetrically placed.

#### **4.5 Workmanship**

a) When examined in accordance with 5.3, the retro-reflective material, licence number and border of a number plate shall be free of creases, chips, blisters, discoloration and spots.

b) The licence number shall be clearly defined.

c) A number plate shall be of such flatness that, when it is laid face upwards on a flat surface, no part, except raised characters or a border, is more than 3 mm from the surface.



## **5 Consolidation of results**

### **5.1 Mechanical and related requirements and tests**

Examine the requirements and the results for compliance with the mechanical and related tests and requirements specified in 4.1, c) i) a), 4.2.3a), 4.2.3b), 4.3, 4.5, 6 and 7 and include values where relevant and any significant details in the report.

### **5.2 Photometric requirements and tests**

Examine the requirements and the results for compliance with the photometric requirements and tests specified in c) i), 4.2.3a), 4.2.3c), 4.2.4, 4.2.5 and include values where relevant and any significant details in the report.

### **5.3 Alpha numeric characters**

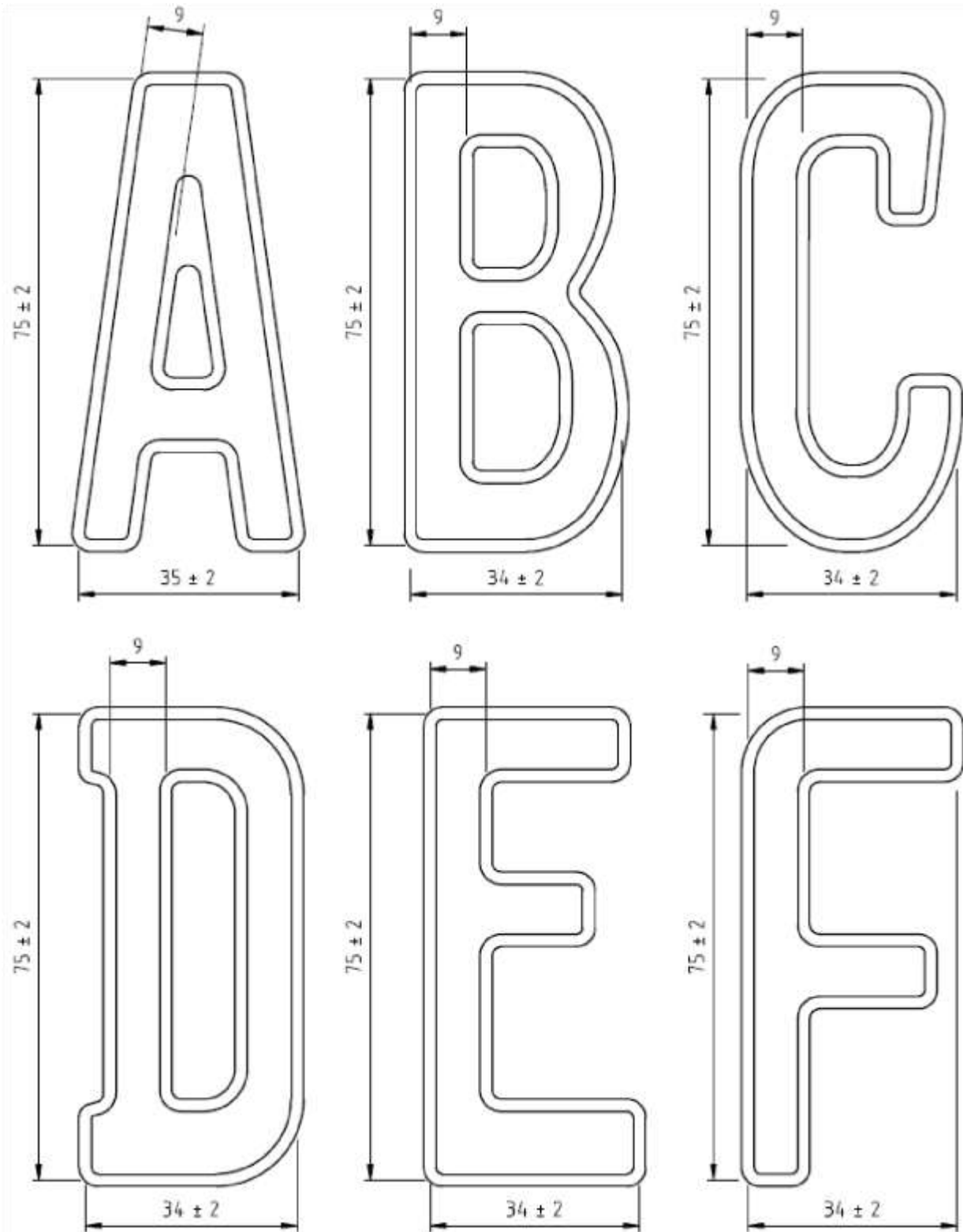
Examine the requirements and the results for compliance with the number, height, form, spacing, style and dimensions of the characters specified in 4.4 and Figures 1 and 2 and include values obtained and any deviations from the requirements.

## **6 Packing**

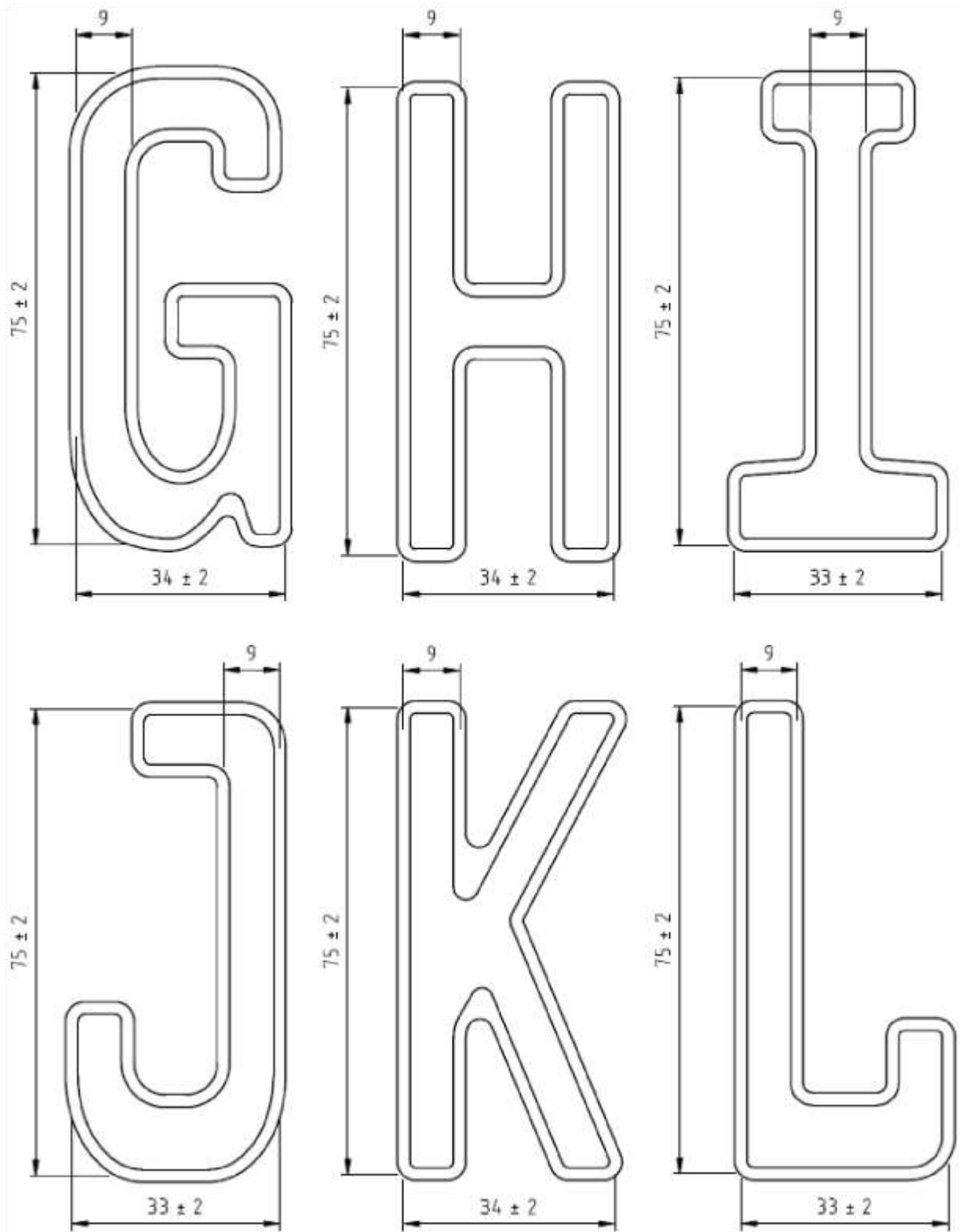
The blank plates shall be so packed as to ensure that they are not damaged during normal handling, transportation and storage.

## **7 Marking**

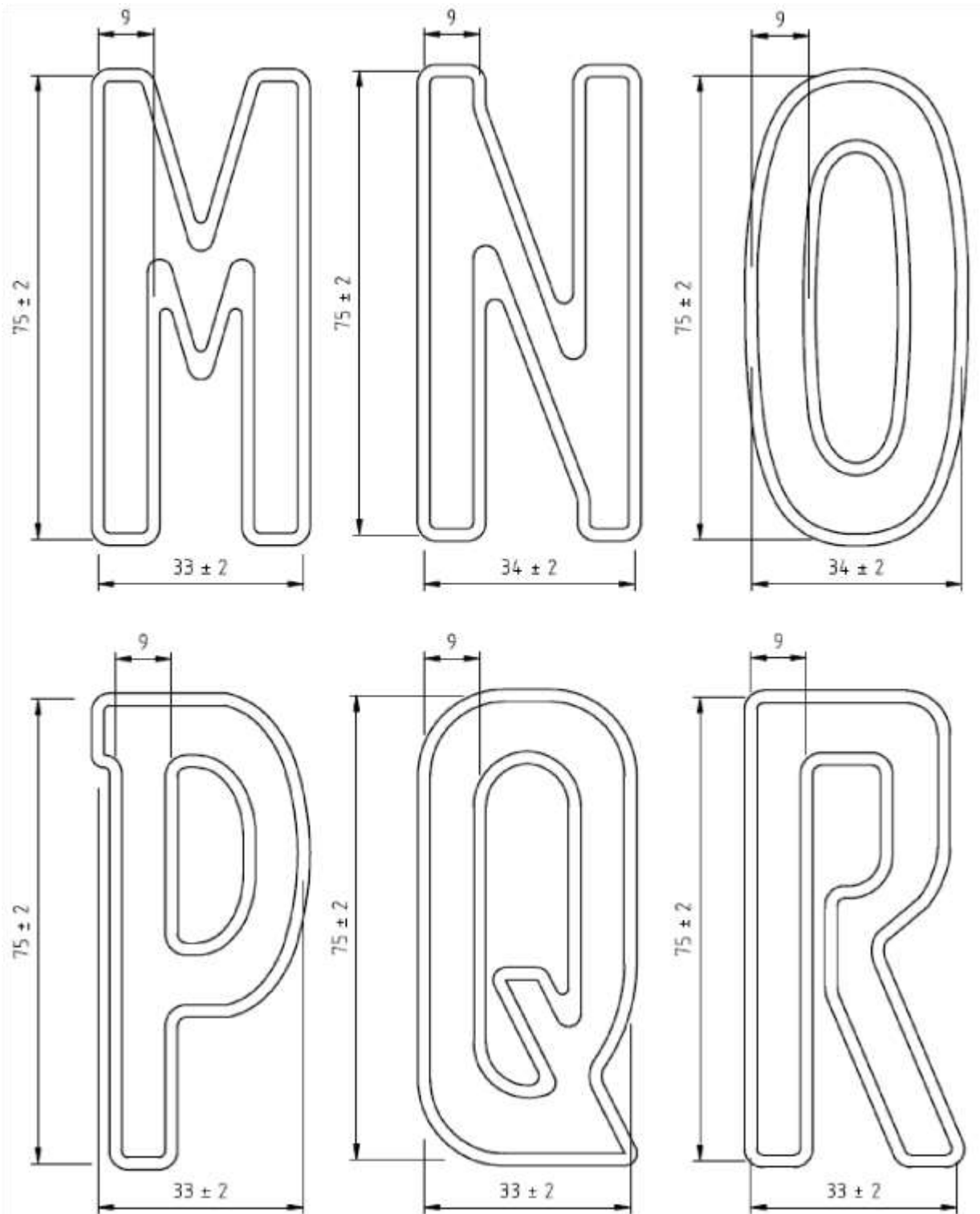
- a) The retroreflective material shall bear a legible and indelible validation mark that forms an integral part of the material and which identifies the manufacturer of the material, the manufacturer's batch number and the year of manufacture. Such mark shall not interfere with the legibility of the number plate
- b) The front surface of each blank number plate shall bear only the graphic, expiry decal (when applicable), the marking required in a) and c), and the border. The marking shall not interfere with the legibility of the licence number.
- c) The front surface of each blank plate shall bear, in legible and indelible marking, the trade name or trademark and the batch number of the manufacturer of blank plates in the left front bottom corner, in a space of height approximately 5 mm and of length approximately 50 mm.



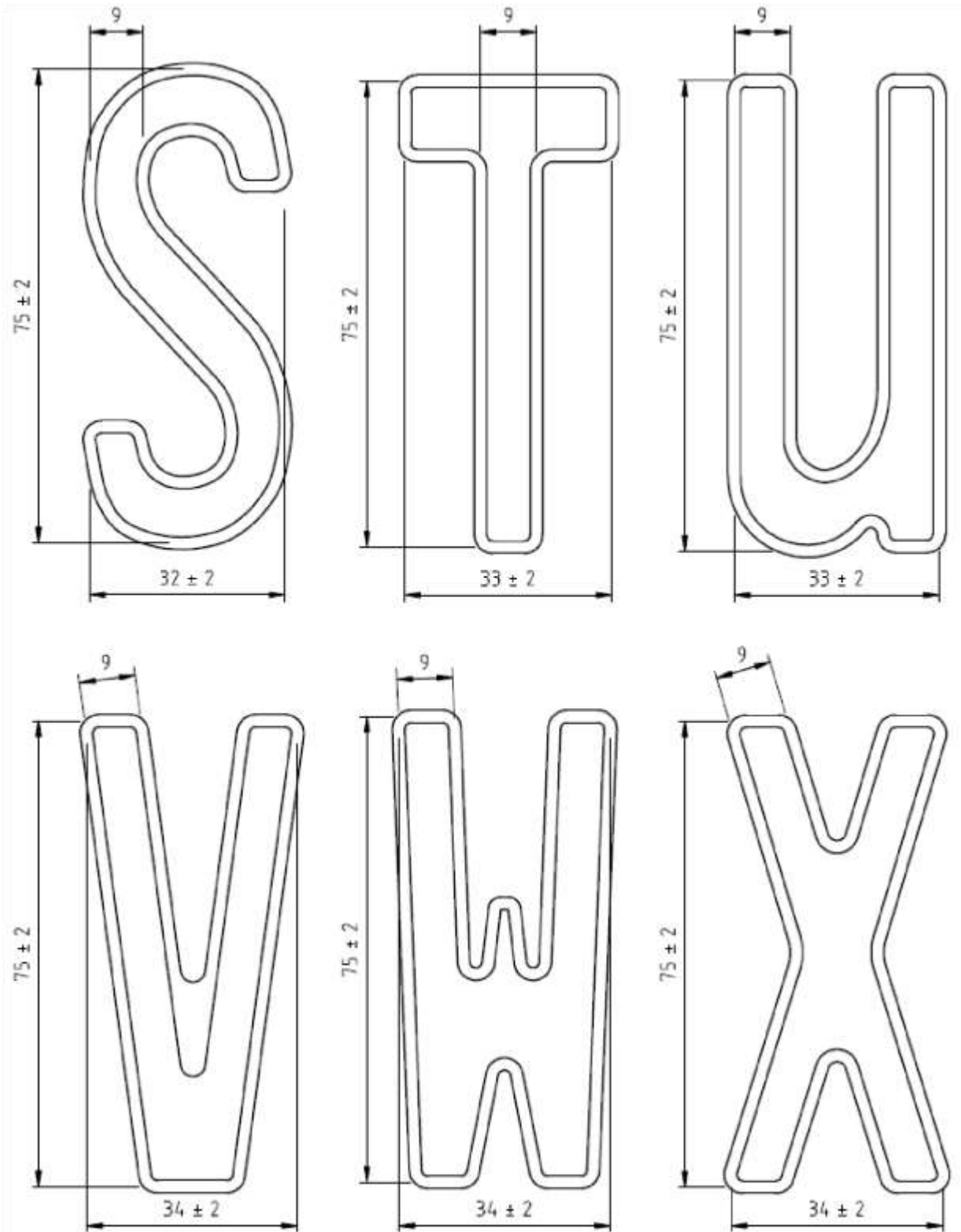
**Figure 1a): Sizes, shapes and styles of alpha numeric characters for 75mm characters: A to F (dimensions in mm)**



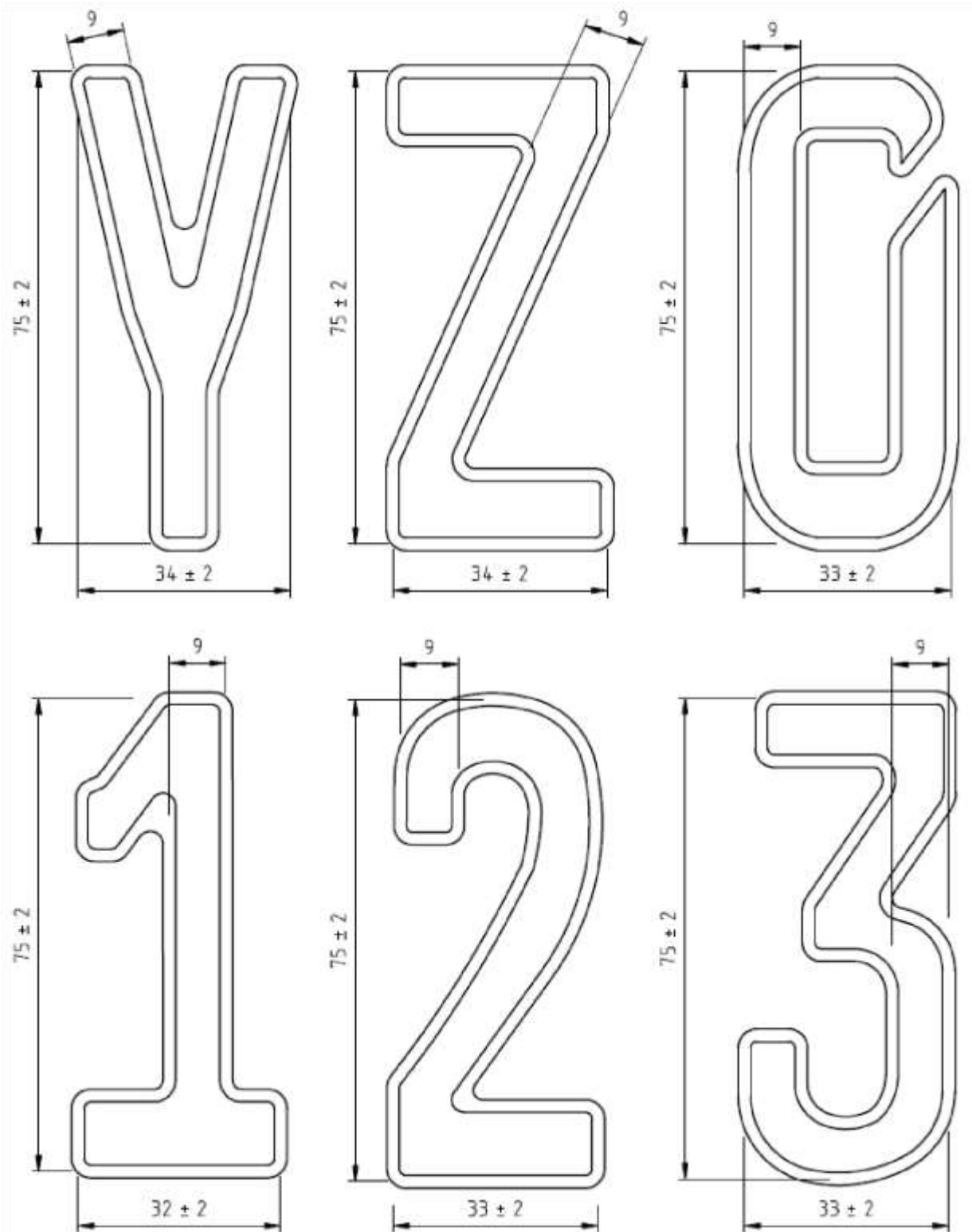
**Figure 2b): Sizes, shapes and styles of alpha numeric characters for 75mm characters: G to L (dimensions in mm)**



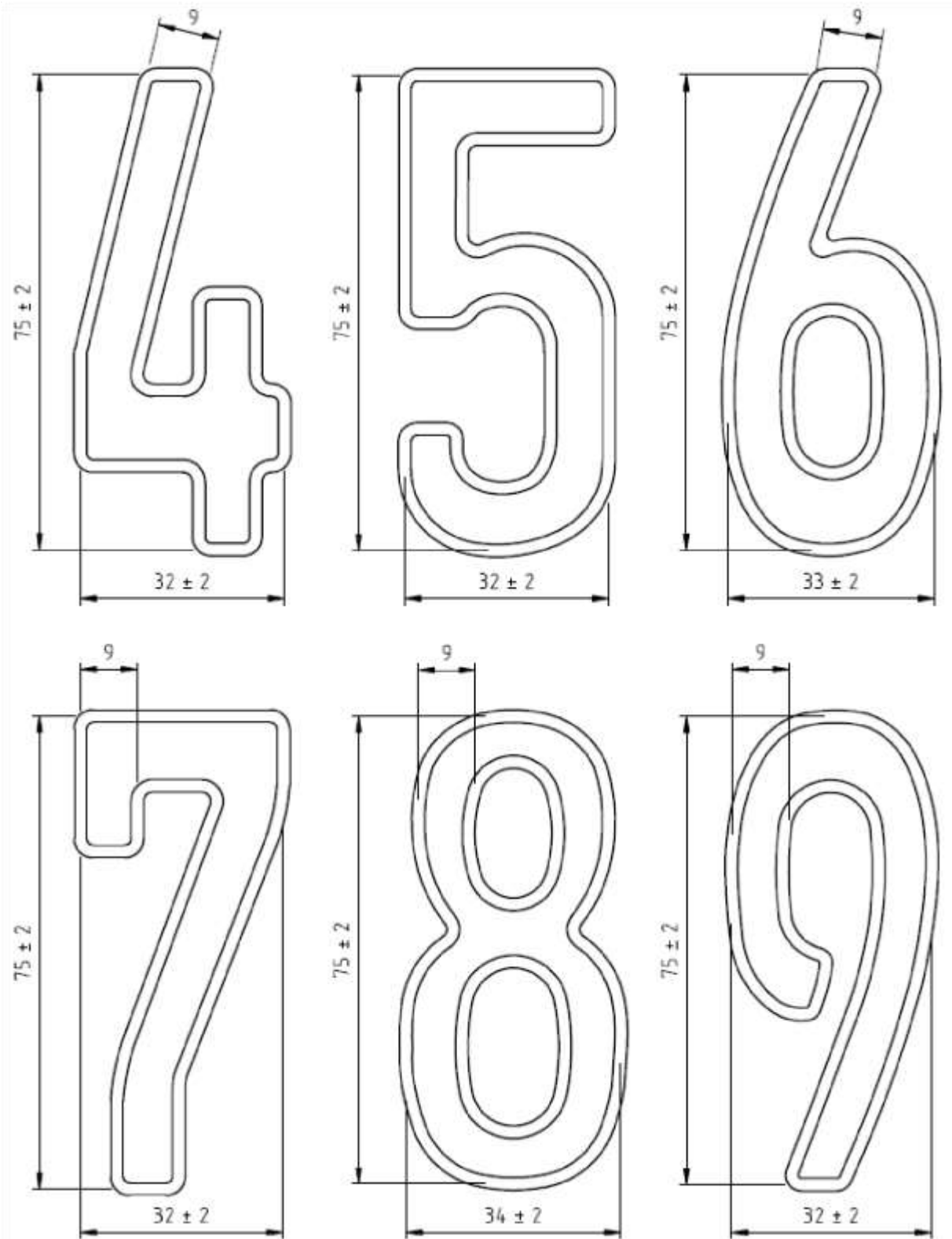
**Figure 3c): Sizes, shapes and styles of alpha numeric characters for 75mm characters: M to R (dimensions in mm)**



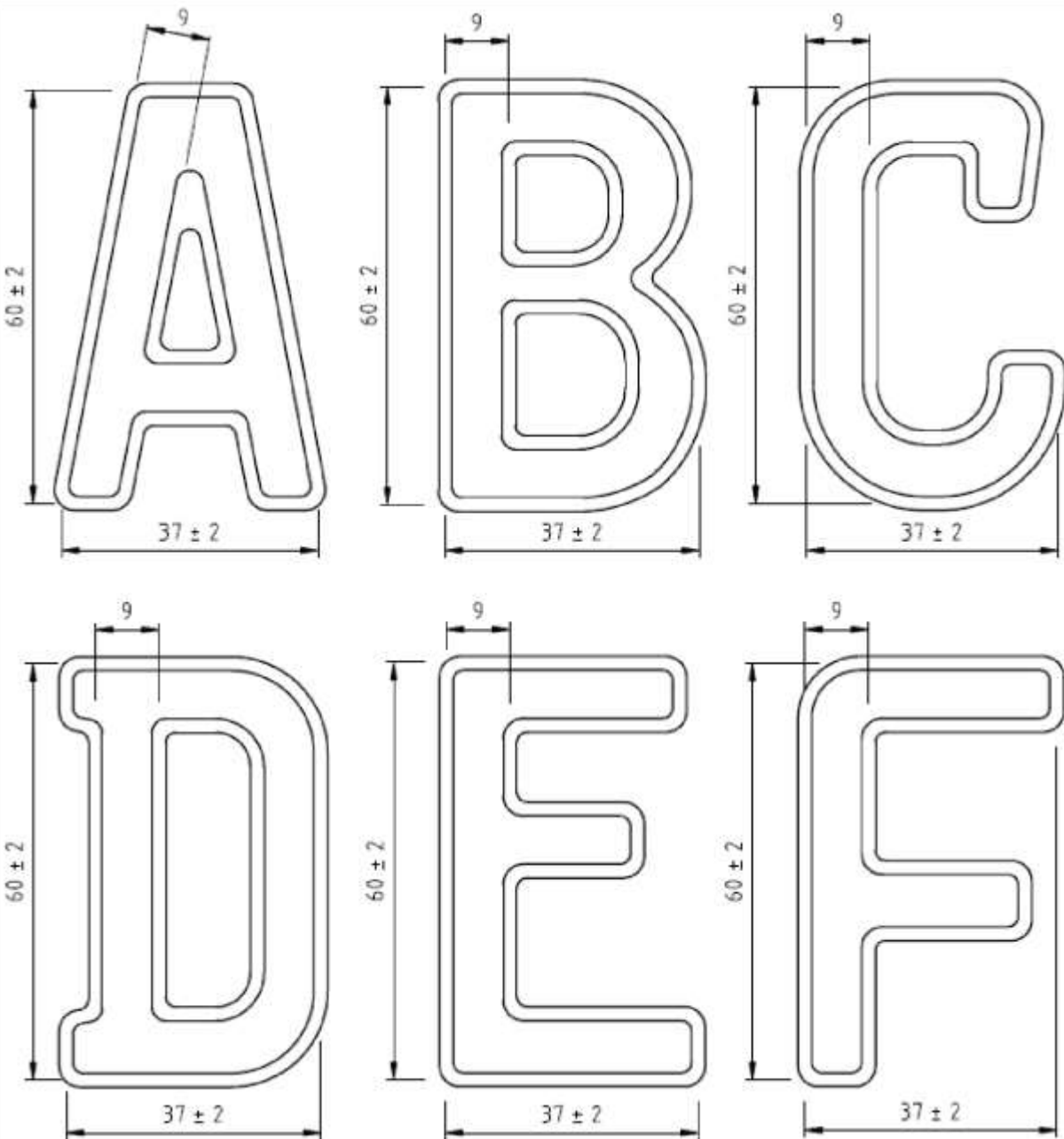
**Figure 4d): Sizes, shapes and styles of alpha numeric characters for 75mm characters: S to X (dimensions in mm)**



**Figure 5e): Sizes, shapes and styles of alpha numeric characters for 75mm characters: Y to Z and 0 to 3 (dimensions in mm)**

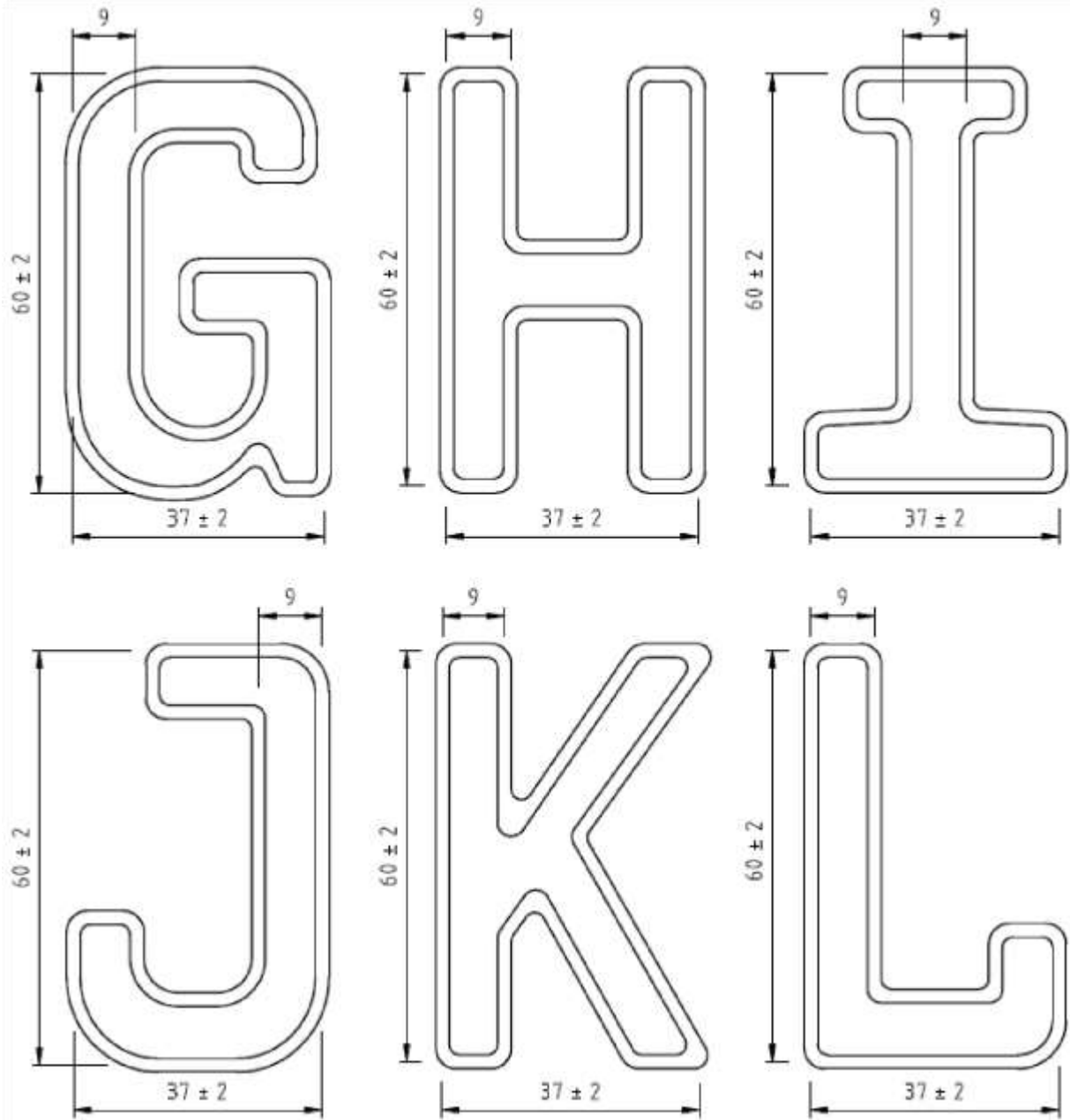


**Figure 6f): Sizes, shapes and styles of alpha numeric characters for 75mm characters: 4 to 9 (dimensions in mm)**

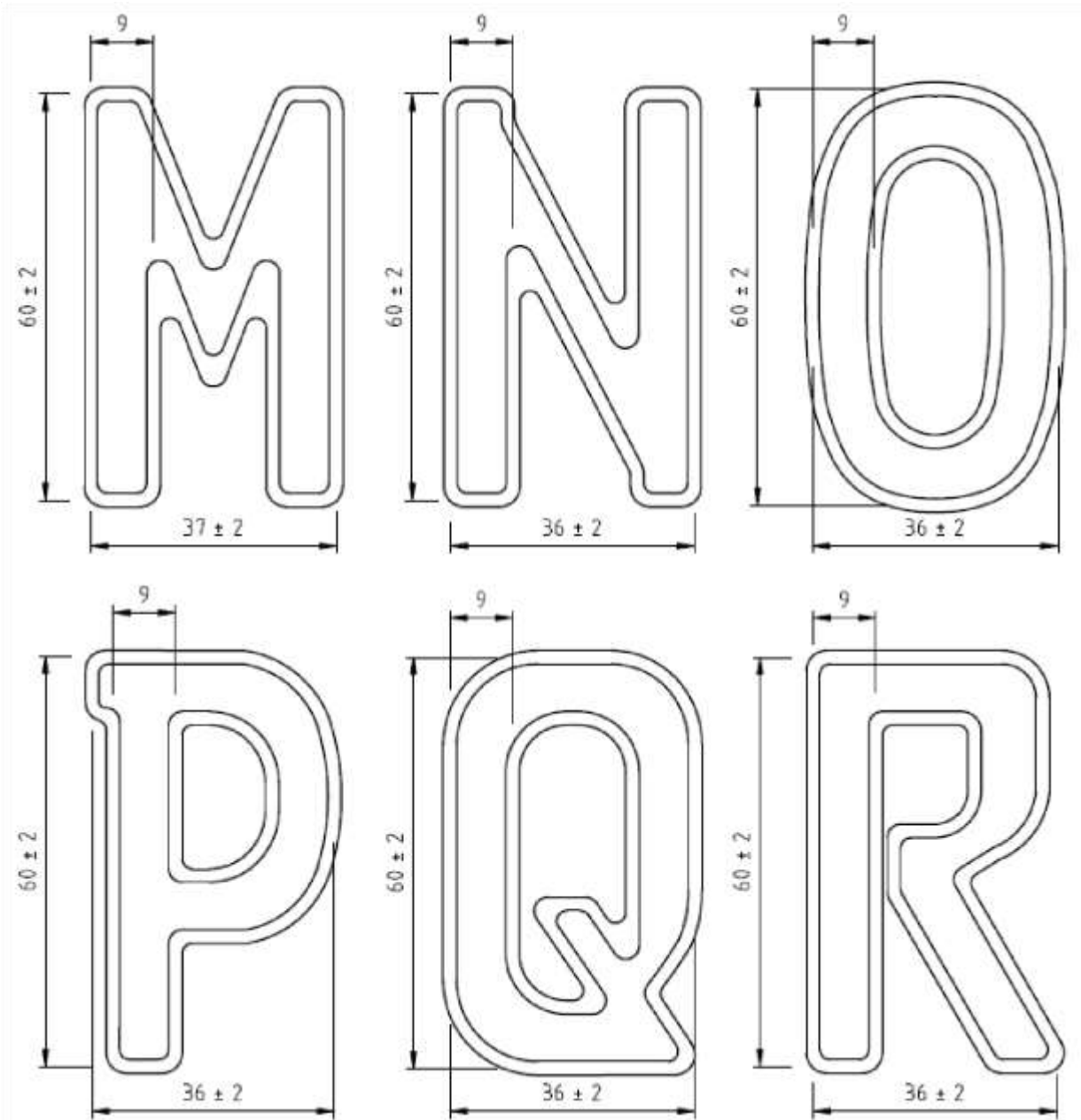


**Figure 7a): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: A to F (dimensions in mm)**

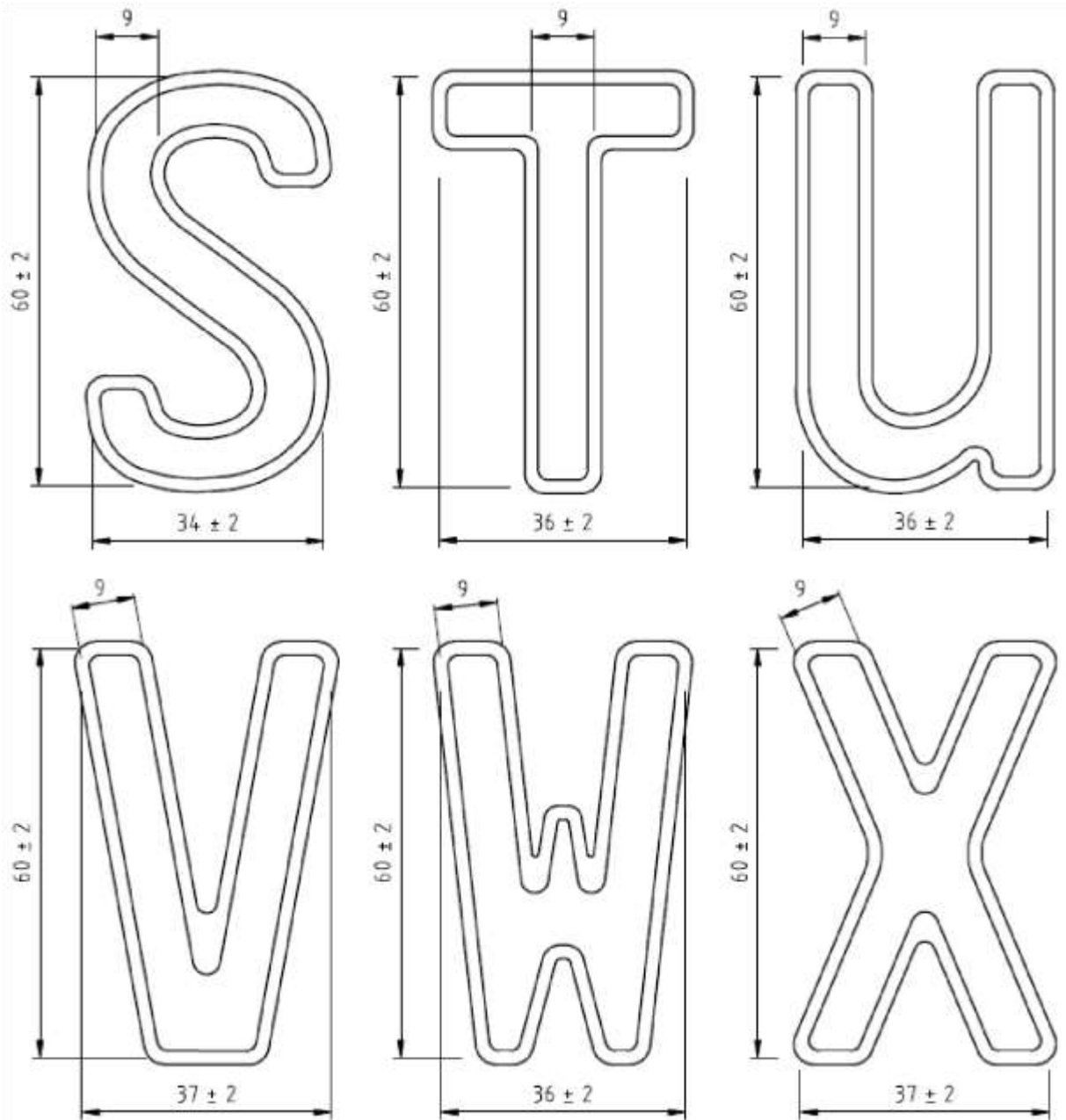




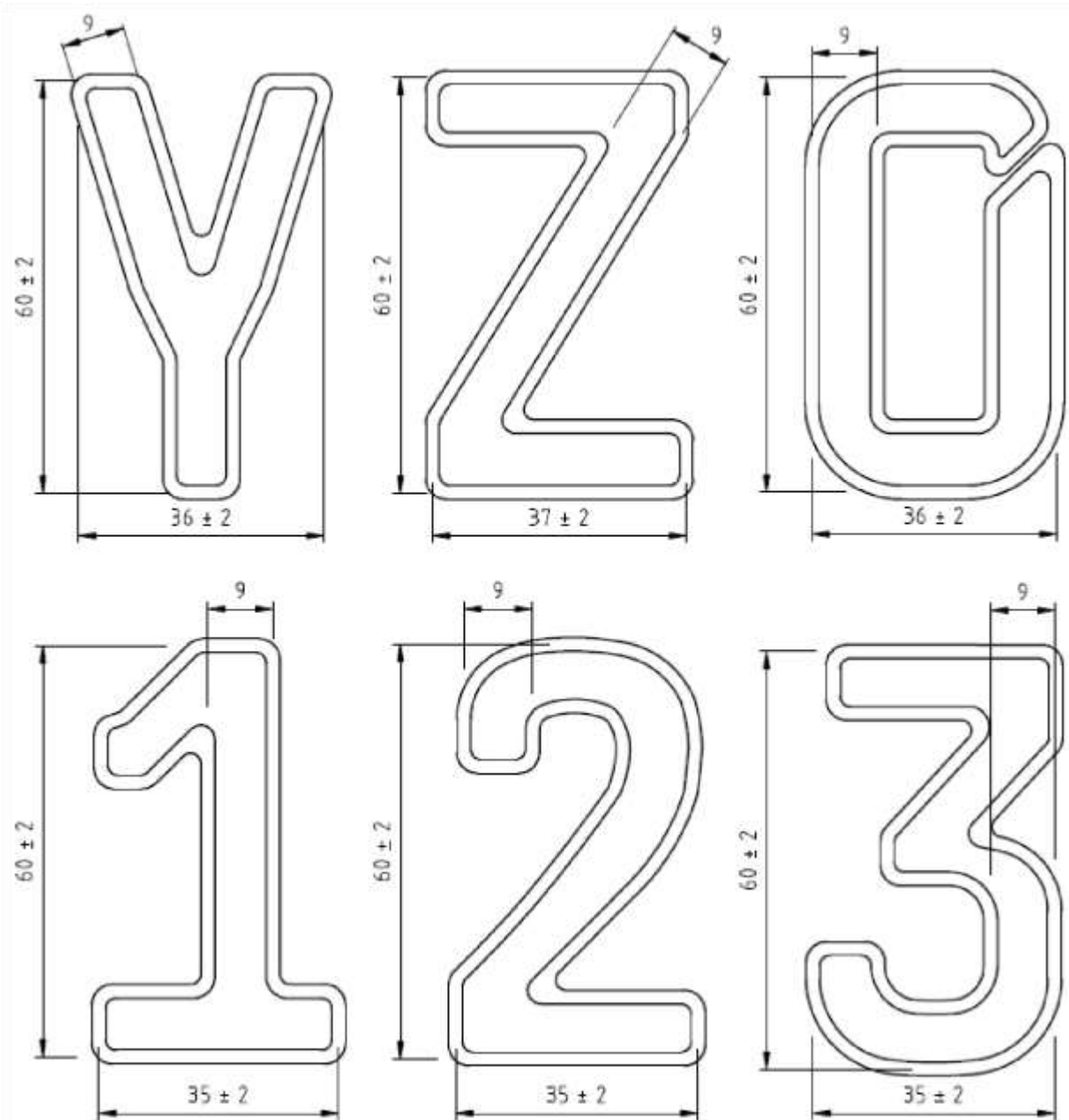
**Figure 8b): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: G to L (dimensions in mm)**



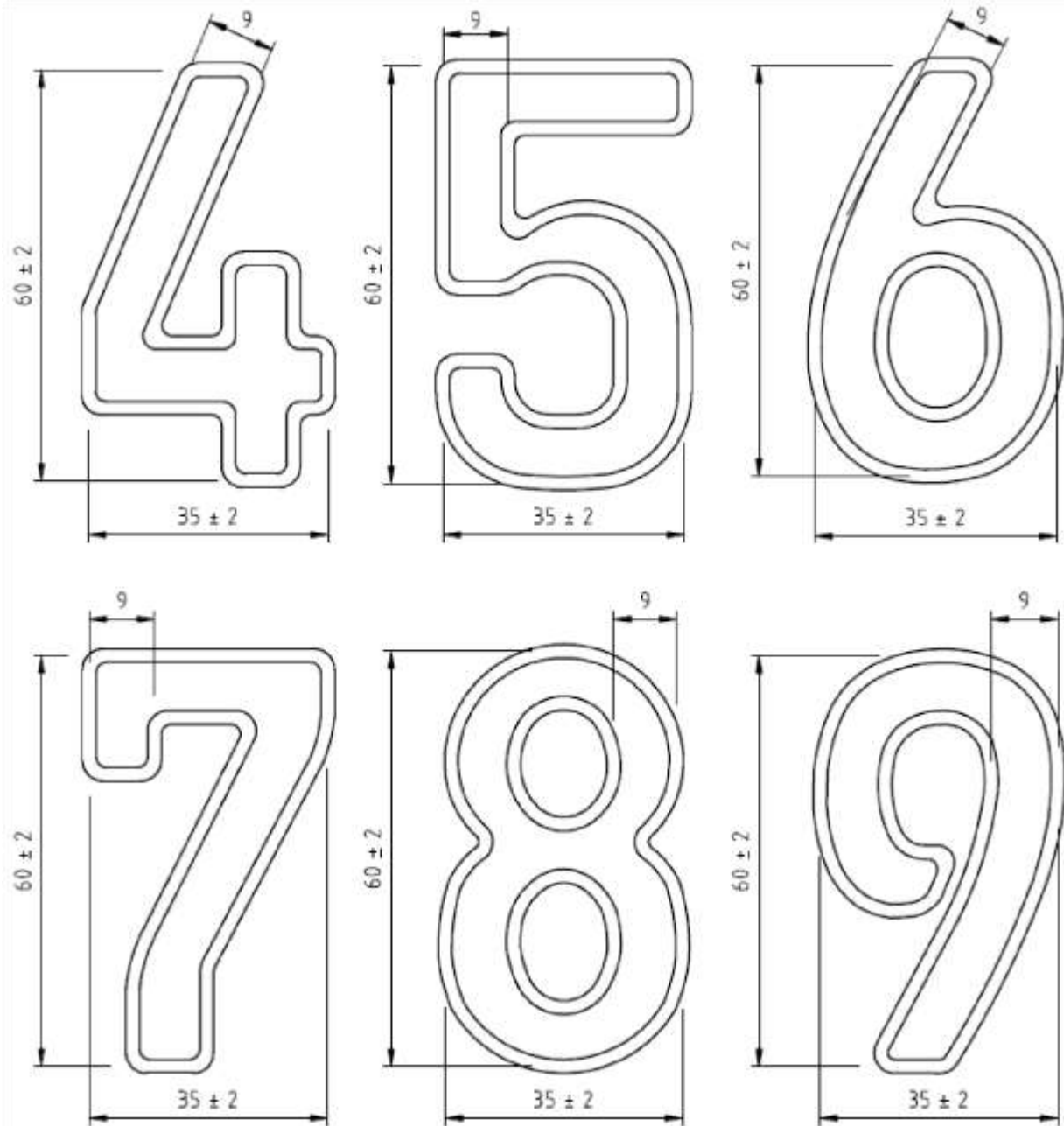
**Figure 9c): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: M to R (dimensions in mm)**



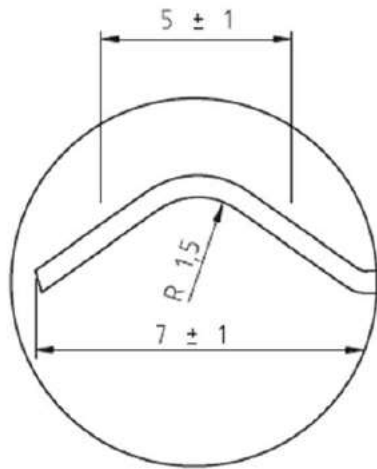
**Figure 10d): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: S to X (dimensions in mm)**



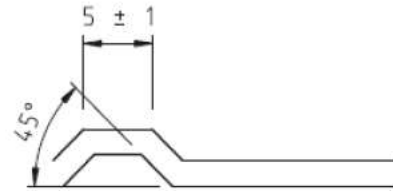
**Figure 11e): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: Y to Z and 0 to 3 (dimensions in mm)**



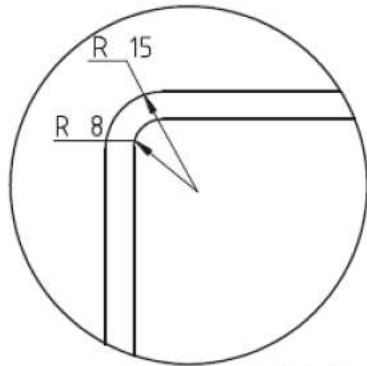
**Figure 12f): Sizes, shapes and styles of alpha numeric characters for 60 mm characters: 4 to 9 (dimensions in mm)**



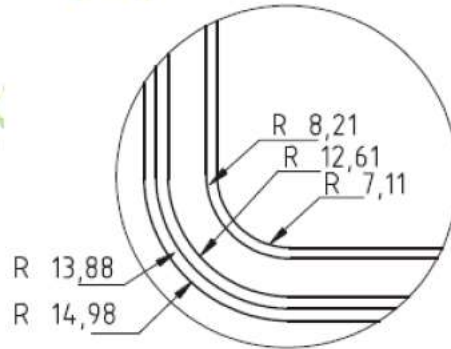
a) Embossed border for Type A



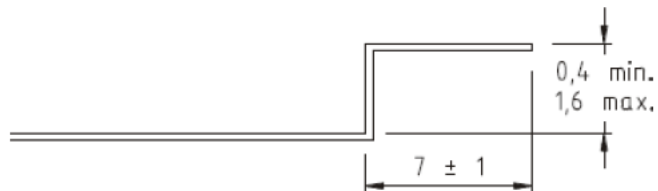
b) Alternate embossed body border for Type A



c) Embossed border for Type A

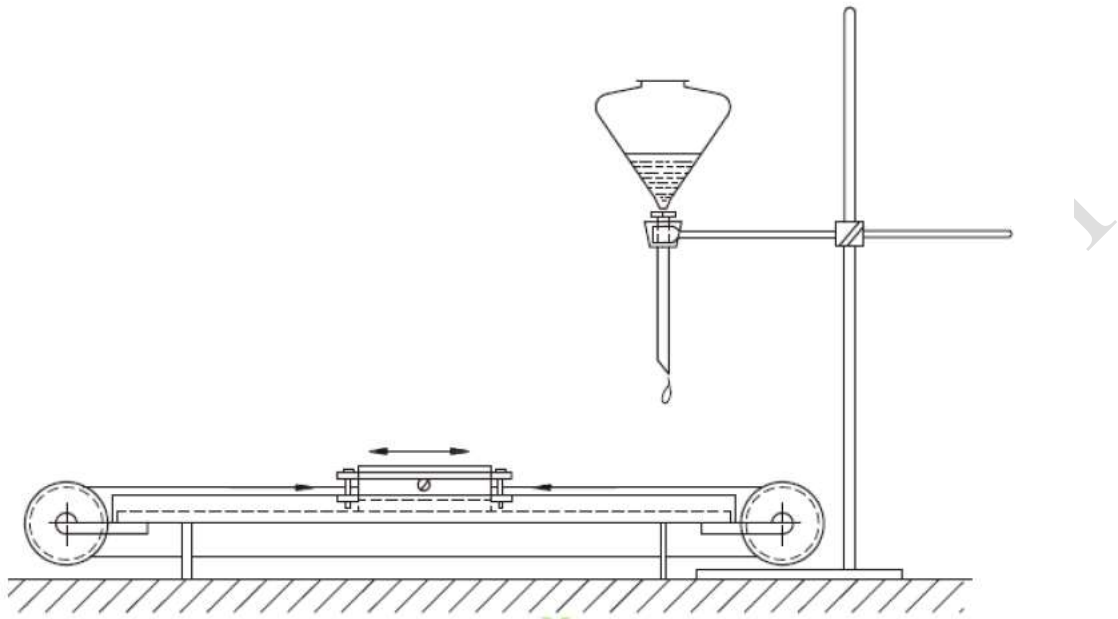


d) Alternate embossed border for Type A



e) Embossed border for Type B

Figure 3: Borders of Number Plates



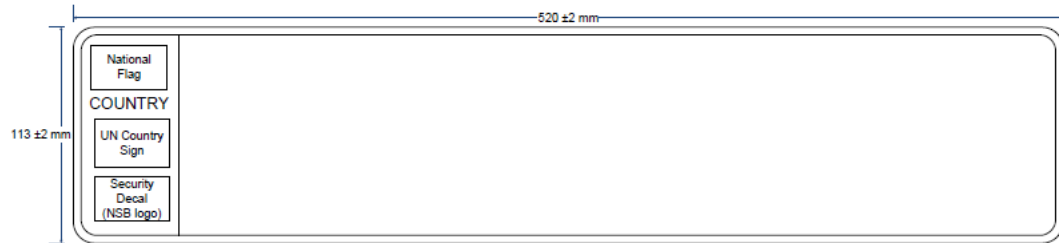
**Figure 4: Apparatus for resistance to abrasion testing**

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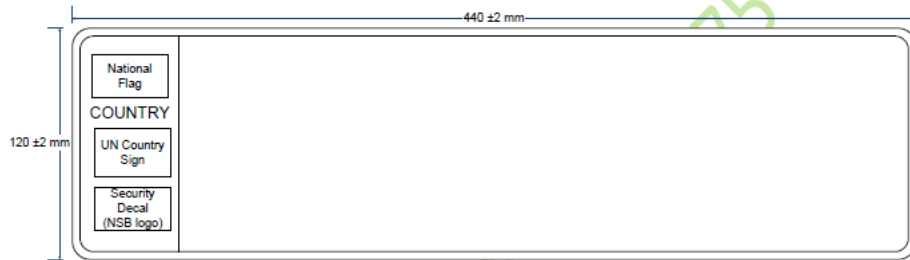
# Annex A

(normative)

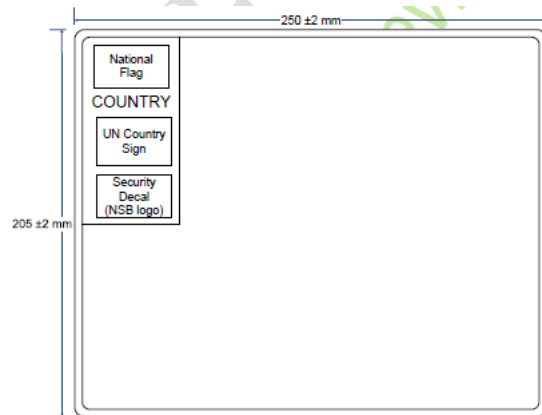
## Number Plate Layout



**Figure 5a): 520 ± 2 mm x 113 ± 2 mm plate**

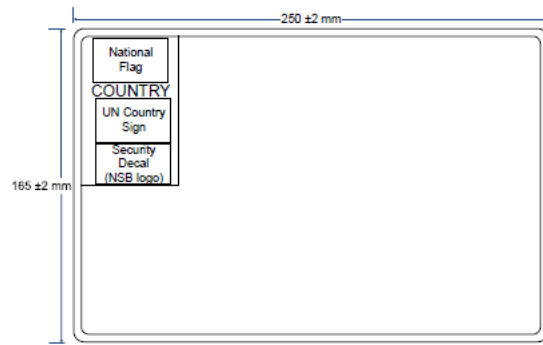


**Figure 5b): 440 ± 2 mm x 120 ± 2 mm plate**



**Figure 5c): 250 ± 2 mm x 205 ± 2 mm plate**





**Figure 5d): 250 ± 2 mm x 165 ± 2 mm plate**

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## Annex B

(normative)

### Location of holes on number plates

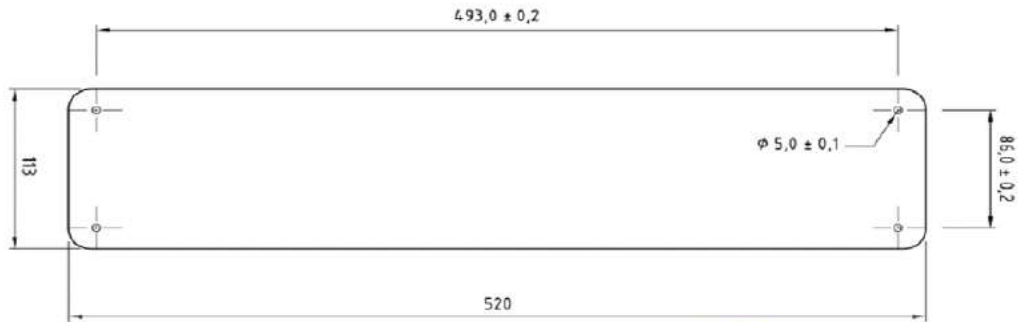


Figure 6a): 520 ± 2 mm x 113 ± 2 mm plate

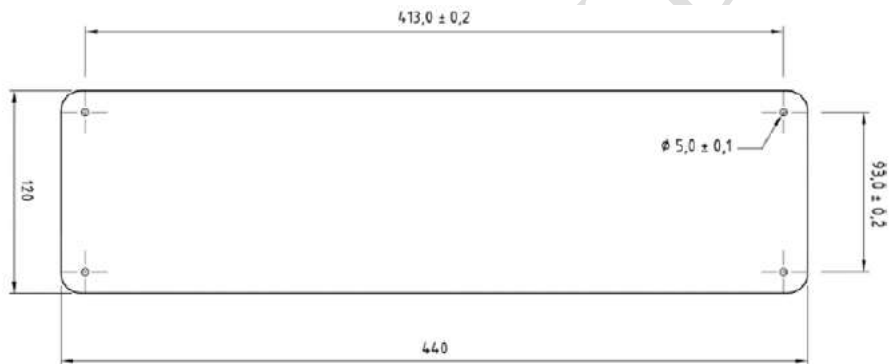


Figure 6b): 440 ± 2 mm x 120 ± 2 mm plate

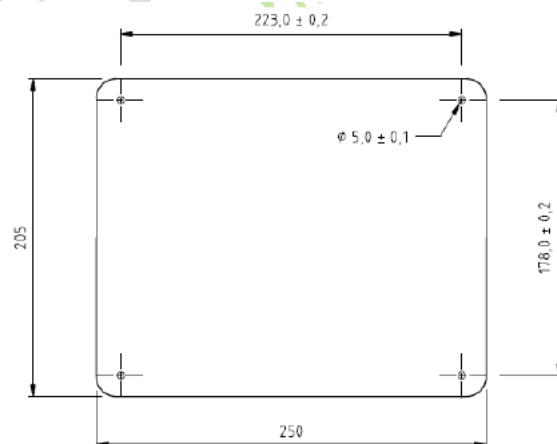
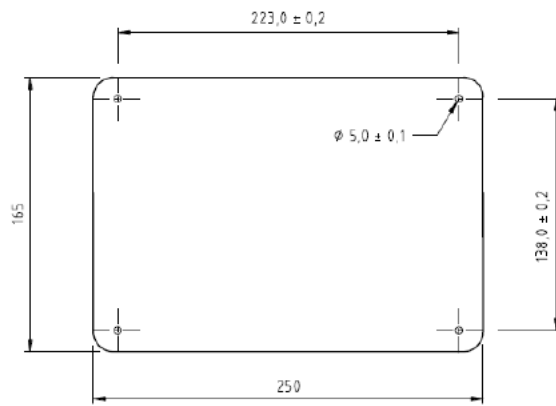


Figure 6c): 250 ± 2 mm x 205 ± 2 mm plate



**Figure 6d): 250 ±2 mm x 165 ±2 mm plate**

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## **Annex C**

(normative)

### **Security Decal**

- a) A tamper-proof security decal is issued to a manufacturer of blank plates for each number plate the material of which have been approved as compliant by the relevant approving authority.
- b) Each security decal issued shall contain at least the following:
  - i) the logo of the approving body symbolising the certification of compliance of each number plate to allow visible recognition of compliance to this standard, and
  - ii) reference number of such manufacturer for traceability.
- c) Such manufacturer then supplies a decal for each blank number plate sold to an embosser and prints the reference number of the relevant embosser on the security decal.
- d) The manufacturer and/or embosser reference number should be machine readable without the need for proprietary equipment.
- e) The security decal affixed to a number plate shall comply with similar test conditions than the retroreflection material upon application to the aluminium plate, but for the colour, luminance and retroreflection properties to enable resistance to the heat, UV radiation, moisture and abrasion that number plates are exposed to under normal wear and tear conditions.
- f) The tamper proof nature of the security decal shall render it impossible to remove the decal intact from any number plate or to apply the decal to another number plate.

**Annex D**  
(normative)

**UN Country Sign**

The distinguishing sign of the issuing country in Africa, as notified to the UN Secretary General in accordance with the UN Conventions on Road Traffic (1949 and/or 1968) on 7 July 2023, is provided in Table D.1.

**Table D.1 — Distinguishing signs notified in accordance with UN Conventions on Road Traffic**

Country	Distinguishing sign	Country	Distinguishing sign
Algeria	DZ	Morocco	MA
Benin	DY	Namibia	NAM
Botswana	BW	Niger	RN
Central African Republic	RCA	Nigeria	WAN
Congo	RCB	Rwanda	RWA
Côte d'Ivoire	CI	Senegal	SN
Democratic Republic of the Congo	ZRE	Seychelles	SY
Egypt	ET	Sierra Leone	WAL
Eswatini	SD	South Africa	ZA
Gambia	WAG	Togo	TG
Ghana	GH	Tunisia	TN
Kenya	EAK	Uganda	EAU
Lesotho	LS	United Republic of Tanzania	TZA
Liberia	LB	Tanganyika	EAT
Madagascar	RM	Zanzibar	EAZ
Malawi	MW	Zambia	RNR
Mali	RMM	Zimbabwe	ZW
Mauritius	MS		

Other distinguishing signs used by United Nations Member States, not Contracting Parties to the 1968 Convention on Road Traffic and/or the 1949 Convention on Road Traffic on 7 July 2023, are provided in Table D.2.

**Table D.2 — Distinguishing signs of countries**

<b>Country</b>	<b>Distinguishing sign</b>	<b>Country</b>	<b>Distinguishing sign</b>
Angola	AO	Gabon	G
Burkina Faso	BF	Guinea	RG
Burundi	RU	Libyan Arab Jamahiriya	LAR
Cameroon	CAM	Mauritania	RIM
Chad	TCH/TD	Mozambique	MOC
Eritrea	ER	Somalia	SO
Ethiopia	ETH	Sudan	SUD

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SANS 1116-1: 2016 – Retro-reflective number plates for motor vehicles – Blank plates (aluminium)  
SANS 1116-2: 2016 – Retro-reflective number plates for motor vehicles – Number plates (aluminium)  
ZS 266: 2017 – Reflex-Reflecting vehicle number plates – Specification

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