

Precoated hot-dip aluminum-plated steel sheets and strip

KES B – F011

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1. Scope of Application

This shall regulate precoated hot-dip aluminum-plated steel sheets and strip (Hereinafter, this shall be “steel sheet and strip”) which is made by coating heat-resisting plastic on one or both sides of it and heating it .

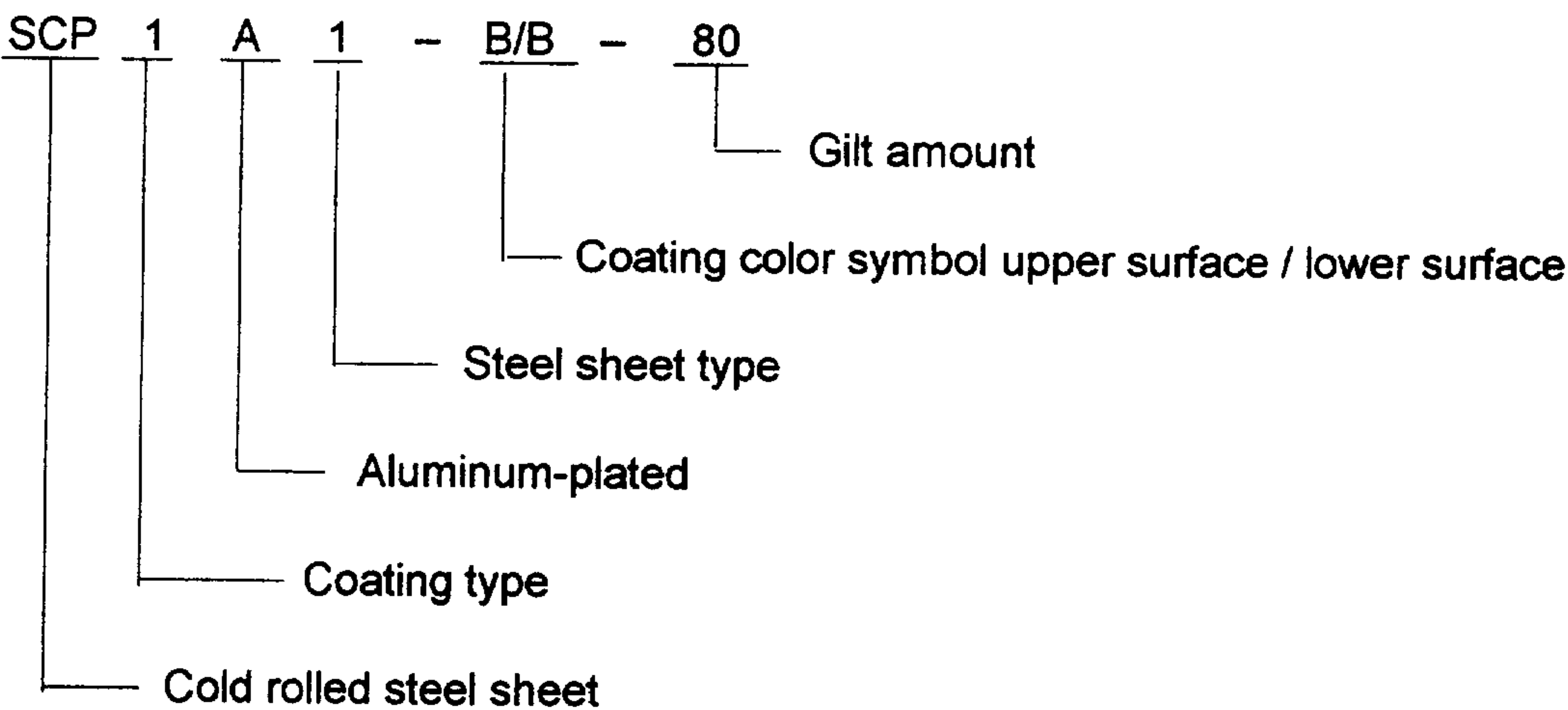
2. Type and symbol

Types of sheets and coil and material symbol shall be the same as table 1.

Table 1 Type and material symbol

Type	Material symbol	Application			
		Main usage	Form symbol of used material	Coating color symbol	Aluminum gilt mass
1 type	SCP 1A	Heat-resisting to 150℃	1 (SCPIA1) 2 (SCPIA1) 3 (SCPIA1)	B (Black) S (Silver)	80
2 type	SCP 2A	Heat-resisting to 200℃			
3 type	SCP 3A	Heat-resisting to 250℃			
4 type	SCP 4A	Heat-resisting to 300℃			

Remark 1. Example and explanation of indication



2. Use hot-dip aluminum-plated steel sheets and strip shown in KES B-A004 according to its usage and standard symbol of used material and usage shall be the same as table 2.

Table 2 Used material

Standard symbol of used material	Usage	Material symbol (KES B-A001)
SCPA1	General	SPA1C
SCPA2	General	SPA1D
SCPA3	Deep drawing	SPA1E

3. Coat one or both of material and select coating method according to color symbol. Uncoated surface shall be '0'.

(Example) B/0-80 ... Coat upper surface with black.

S/S-80 ... Coat both surfaces with silver.

3. Gilt amount

Gilt amount symbol and aluminum minimum gilt amount shall be the same as table 3.

Table 3 Aluminum gilt amount

Aluminum gilt amount symbol		80
Minimum gilt amount	Both sides (g/m ²)	80
Minimum gilt amount	One side (g/m ²)	30

Remark : Minimum gilt amount shall be mass of aluminum plated on one or both sides and select arithmetic average of 3 test samples out of sample sheets.

4. Coated Anti-Corrosion Property

Salt spraying test in table 4 shall be applied to a steel sheet and strip. Follow the clause 9.1 for a test method. After performing a test continuously for the time shown in table 4, the damages such as swell and strip-off of coating should be less than 10 mm on the diagonal line of one face.

In addition, KIA can direct producer to perform other tests if necessary and in this case,]

decide the method and standard of this test under agreement of KIA and producer.

Table 4 Salt spraying test

Material symbol	Spraying time
SCP1A	500 hours
SCP2A	
SCP3A	
SCP4A	

5. Coated Material Property

5.1 Heat-resisting property

Perform a heat-resisting test of a steel sheet shown in table 5. Perform the test according to the clause 9.2.2 and there should be no strip-off after heating according to the condition of table 5.

Table 5 Heat-resisting test

Material symbol	Heating temperature	Heating hour
SCP1A	150 °C	200 hours
SCP2A	200 °C	200 hours
SCP3A	250 °C	200 hours
SCP4A	300 °C	200 hours

5.2 Coat solidity to bending

Perform a bending test of a steel sheet shown in table 6. Perform the test according to the clause 9.2.3 and there should be no coat strip-off on the outer surface of a bended section. However, there can be strip-off within 7mm from both sides.