

DÉCLARATION DE PERFORMANCES N° SIG 13 B

Code identique du produit: SIG13B

Utilisation prévue: Panneaux pour les panneaux de signalisation verticaux à plan d'image rétro-réfléchissant, Classe 2 High Intensity.

Fabricant :

Signco BV
Jozef De Blockstraat 74
2830 Willebroek

Le système d'évaluation et de vérification de la conformité des performances:

L'organisme notifié **OCAB-OCBS CE 1148** a exécuté les tâches selon le système 1 et a émis le certificat de constance des performances **1148-CE-20130304**, le certificat de conformité du contrôle de la production en usine et les rapports sur les tests et les calculs.

Les performances indiquées des produits sont repris dans le tableau ci-dessous, selon les spécifications techniques harmonisées de la NBN EN 12899-1:2007.

Caractéristiques essentielles	Performances	Spécifications techniques harmonisées
Résistance aux charges horizontales		
Éléments de fixation	Conforme	NBN EN 12899-1:2007
Actions du vent	WL4	NBN EN 12899-1:2007
Déformation temporaire : flexion	TDB5	NBN EN 12899-1:2007
Actions suite au déneigement	NPD	NBN EN 12899-1:2007
Charge concentrée	PL2	NBN EN 12899-1:2007
Déformation permanente	Conforme	NBN EN 12899-1:2007
Coefficient partiel de sécurité	PAF 1	NBN EN 12899-1:2007
Caractéristiques visuelles		
Panneaux rétro-réfléchissants		
Coordonnées colorimétriques à la lumière du jour & indice de luminance	Tableau 1.2 (annexe)	ETA 18-0290 ETA 17-0491 EAD 120001-01-0106:2016
Coefficient rétro-réfléchissant	Tableau A.1 et Annex 1 (annexe)	ETA 18-0290 ETA 17-0491 EAD 120001-01-0106:2016
Durabilité		
Résistance à l'altération du matériel du plan de l'image		
Coordonnées colorimétriques à la lumière du jour & indice de luminance	Tableau 1.3 (annexe)	ETA 18-0290 ETA 17-0491 EAD 120001-01-0106:2016
Coefficient rétro-réfléchissant	>80% du Tableau A.1 et Annex 1 (annexe)	ETA 18-0290 ETA 17-0491 EAD 120001-01-0106:2016

Résistance à la corrosion	Aluminium SP2	NBN EN 12899-1:2007
Résistance aux chocs	Conforme	NBN EN 12899-1:2007
NPD: "no performance declared"		

Les performances du produit mentionné ci-dessus sont conformes aux performances déclarées. Conformément au règlement (UE) n° 305/2011, cette déclaration de performance est faite sous la seule responsabilité du fabricant nommé ci-dessus.

Signé pour et au nom du fabricant par:

Signco BV
Friso Haerens, Direct général
Jozef De Blockstraat 74
2830 Willebroek

À Willebroek, le 16 février 2023

A handwritten signature in blue ink, appearing to be 'F. Haerens', written over a horizontal line.

Annexe :

ETA 18-290:

Colours		Chromaticity Coordinates				Luminance Factor β
		1	2	3	4	
White Tolerance Sphere*	x	0.305	0.335	0.325	0.295	≥ 0.27
	y	0.315	0.345	0.355	0.325	
Yellow Tolerance Sphere*	x	0.494	0.470	0.513	0.545	> 0.16
	y	0.505	0.480	0.437	0.454	
Red Tolerance Sphere*	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Red on Yellow Tolerance Sphere*	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Blue Tolerance Sphere*	x	0.130	0.160	0.160	0.130	≥ 0.01
	y	0.090	0.090	0.140	0.140	
Green Tolerance Sphere*	x	0.110	0.170	0.170	0.110	≥ 0.03
	y	0.415	0.415	0.500	0.500	
Orange Tolerance Sphere	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Brown Tolerance Sphere*	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Grey Tolerance Sphere*	x	0.305	0.335	0.325	0.295	0.11-0.18
	y	0.315	0.345	0.355	0.325	
Dark Green Tolerance Sphere	x	0.313	0.313	0.248	0.127	0.01-0.07
	y	0.682	0.453	0.409	0.557	

* Chromaticity Coordinates are similar to EN 12899-1:2007 Class CR2

Table 1.2: Manufacturer's specification for initial daylight chromaticity and luminance factor

Colours		Chromaticity Coordinates				Luminance Factor β
		1	2	3	4	
White Tolerance Sphere*	x	0.355	0.305	0.285	0.335	≥ 0.27
	y	0.355	0.305	0.325	0.375	
Yellow Tolerance Sphere*	x	0.545	0.487	0.427	0.465	≥ 0.16
	y	0.454	0.423	0.483	0.534	
Red Tolerance Sphere*	x	0.735	0.674	0.569	0.655	≥ 0.03
	y	0.265	0.236	0.341	0.345	
Red on Yellow Tolerance Sphere*	x	0.735	0.674	0.569	0.655	≥ 0.03
	y	0.265	0.236	0.341	0.345	
Blue Tolerance Sphere*	x	0.078	0.150	0.210	0.137	≥ 0.01
	y	0.171	0.220	0.160	0.038	
Green Tolerance Sphere*	x	0.007	0.248	0.177	0.026	≥ 0.03
	y	0.703	0.409	0.362	0.399	
Orange Tolerance Sphere	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Brown Tolerance Sphere*	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Grey Tolerance Sphere*	x	0.350	0.300	0.285	0.335	0.11-0.18
	y	0.360	0.310	0.325	0.375	
Dark Green Tolerance Sphere*	x	0.313	0.313	0.248	0.127	0.01-0.07
	y	0.682	0.453	0.409	0.557	

* Chromaticity Coordinates are similar to EN 12899-1:2007 Class CR1

Table 1.3: Manufacturer's specification for daylight chromaticity and luminance factor 'in-use'

Geometry of measurement		Colour								
α	β_1 ($\beta_2 = 0$)	White	Yellow	Red	Green	Dark Green	Blue	Brown	Orange	Grey
12'	+5°	250	170	45	45	20	20	12	100	125
	+30°	150	100	25	25	15	11	8.5	60	75
	+40°	110	70	15	12	6	8	5.0	29	55
20'	+5°	180	120	25	21	14	14	8	65	90
	+30°	100	70	14	12	11	8	5	40	50
	+40°	95	60	13	11	5	7	3	20	47
2°	+5°	5	3	1	0.5	0.5	0.2	0.2	1.5	2.5
	+30°	2.5	1.5	0.4	0.3	0.3	#	#	1	1.2
	+40°	1.5	1.0	0.3	0.2	0.2	#	#	#	0.7

Indicates "Value greater than zero but not significant or applicable"

NOTE Coloured areas of signs created by digital or screen printing or using overlay film will need to meet 70% of the values in the table.

Table A.1
Manufacturer's Specification for the Minimum Initial Coefficient of Retro-reflection R_A value
 (Values are identical to EN 12899-1:2007 Class RA2)

ETA 17-0491:

Colours		Chromaticity Coordinates				Luminance Factor β
		1	2	3	4	
White Tolerance Sphere*	x	0.305	0.335	0.325	0.295	≥ 0.40
	y	0.315	0.345	0.355	0.325	
Yellow Tolerance Sphere*	x	0.494	0.470	0.513	0.545	≥ 0.24
	y	0.505	0.480	0.437	0.454	
Red Tolerance Sphere*	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Red on Yellow Tolerance Sphere*	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Blue Tolerance Sphere*	x	0.130	0.160	0.160	0.130	≥ 0.01
	y	0.090	0.090	0.140	0.140	
Green Tolerance Sphere*	x	0.110	0.170	0.170	0.110	≥ 0.03
	y	0.415	0.415	0.500	0.500	
Orange Tolerance Sphere*	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Brown Tolerance Sphere*	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Grey Tolerance Sphere*	x	0.305	0.335	0.325	0.295	0.11-0.18
	y	0.315	0.345	0.355	0.325	
Dark Green Tolerance Sphere*	x	0.313	0.313	0.248	0.127	0.01-0.07
	y	0.682	0.453	0.409	0.557	

* Chromaticity Coordinates are similar to EN 12899-1:2007 Class CR2

Table 1.2: Manufacturer's specification for initial daylight chromaticity and luminance factor

Colours		Chromaticity Coordinates				Luminance Factor β
		1	2	3	4	
White Tolerance Sphere*	x	0.355	0.305	0.285	0.335	≥ 0.40
	y	0.355	0.305	0.325	0.375	
Yellow Tolerance Sphere*	x	0.545	0.487	0.427	0.465	≥ 0.24
	y	0.454	0.423	0.483	0.534	
Red Tolerance Sphere*	x	0.735	0.674	0.569	0.655	≥ 0.03
	y	0.265	0.236	0.341	0.345	
Red on Yellow Tolerance Sphere*	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Blue Tolerance Sphere*	x	0.078	0.150	0.210	0.137	≥ 0.01
	y	0.171	0.220	0.160	0.038	
Green Tolerance Sphere*	x	0.007	0.248	0.177	0.026	≥ 0.03
	y	0.703	0.409	0.362	0.399	
Orange Tolerance Sphere*	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Brown Tolerance Sphere*	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Grey Tolerance Sphere*	x	0.350	0.300	0.285	0.335	0.11-0.18
	y	0.360	0.310	0.325	0.375	
Dark Green Tolerance Sphere*	x	0.313	0.313	0.248	0.127	0.01-0.07
	y	0.682	0.453	0.409	0.557	

* Chromaticity Coordinates are similar to EN 12899-1:2007 Class CR1

Table 1.3: Manufacturer's specification for daylight chromaticity and luminance factor 'in-use'

Annex 1: 3M™ High Intensity Prismatic Digital Sheeting 3930DS + 3M™ Piezo Inkjet Ink + 3M™ Protective Overlay Film 1170

Daylight Chromaticity and Luminance Factor, initial and after accelerated artificial weathering

1.1 Daylight Chromaticity and Luminance Factor, initial

Colours		Chromaticity Coordinates				Luminance Factor β
		1	2	3	4	
White Tolerance Sphere	x	0.305	0.335	0.325	0.295	≥ 0.40
	y	0.315	0.345	0.355	0.325	
White Sample 1	x	0.315				0.44
	y	0.332				
White Sample 2	x	0.316				0.43
	y	0.333				
White Sample 3	x	0.315				0.44
	y	0.333				
Yellow Tolerance Sphere	x	0.494	0.470	0.513	0.545	≥ 0.24
	y	0.505	0.480	0.437	0.454	
Yellow Sample 1	x	0.481				0.28
	y	0.474				
Yellow Sample 2	x	0.476				0.28
	y	0.474				
Yellow Sample 3	x	0.481				0.27
	y	0.486				
Red Tolerance Sphere	x	0.735	0.700	0.610	0.660	≥ 0.03
	y	0.265	0.250	0.340	0.340	
Red Sample 1	x	0.630				0.07
	y	0.331				
Red Sample 2	x	0.625				0.07
	y	0.332				
Red Sample 3	x	0.637				0.07
	y	0.331				
Blue Tolerance Sphere	x	0.130	0.160	0.160	0.130	≥ 0.01
	y	0.090	0.090	0.140	0.140	
Blue Sample 1	x	0.141				0.04
	y	0.130				
Blue Sample 2	x	0.146				0.06
	y	0.139				
Blue Sample 3	x	0.141				0.05
	y	0.129				
Green Tolerance Sphere	x	0.110	0.170	0.170	0.110	≥ 0.03
	y	0.415	0.415	0.500	0.500	
Green Sample 1	x	0.169				0.06
	y	0.438				
Green Sample 2	x	0.166				0.05
	y	0.476				
Green Sample 3	x	0.160				0.06
	y	0.448				
Orange Tolerance Sphere	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Orange Sample 1	x	0.546				0.16
	y	0.404				
Orange Sample 2	x	0.544				0.15
	y	0.407				
Orange Sample 3	x	0.527				0.16
	y	0.397				

Colours	Chromaticity Coordinates				Luminance Factor B	
	1	2	3	4		
Brown <i>Tolerance Sphere</i>	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Brown Sample 1	x	0.524			0.05	
	y	0.402				
Brown Sample 2	x	0.515			0,05	
	y	0.396				
Brown Sample 3	x	0,523			0,04	
	y	0.394				
Grey <i>Tolerance Sphere</i>	x	0.305	0.335	0.325	0.295	0.11-0.18
	y	0.315	0.345	0.355	0.325	
Grey Sample 1	x	0.321			0.16	
	y	0.336				
Grey Sample 2	x	0.321			0.15	
	y	0.336				
Grey Sample 3	x	0.323			0.14	
	y	0.338				
Dark Green <i>Tolerance Sphere</i>	x	0.313	0.313	0.248	0.127	0.01-0.07
	y	0.682	0.453	0.409	0.557	
Dark Green Sample 1	x	0.233			0.06	
	y	0.501				
Dark Green Sample 2	x	0.212			0.06	
	y	0.561				
Dark Green Sample 3	x	0.250			0.05	
	y	0.535				

1.2 Daylight Chromaticity and Luminance Factor, after accelerated artificial weathering

Colours		Chromaticity Coordinates				Luminance Factor B
		1	2	3	4	
White Tolerance Sphere	x	0.355	0.305	0.285	0.335	≥ 0.40
	y	0.355	0.305	0.325	0.375	
White Sample 1	x	0.316				0.45
	y	0.333				
White Sample 2	x	0.317				0.45
	y	0.335				
White Sample 3	x	0.316				0.45
	y	0.333				
Yellow Tolerance Sphere	x	0.545	0.487	0.427	0.465	≥ 0.24
	y	0.454	0.423	0.483	0.534	
Yellow Sample 1	x	0.476				0.29
	y	0.474				
Yellow Sample 2	x	0.467				0.28
	y	0.474				
Yellow Sample 3	x	0.474				0.28
	y	0.479				
Red Tolerance Sphere	x	0.735	0.674	0.569	0.655	≥ 0.03
	y	0.265	0.236	0.341	0.345	
Red Sample 1	x	0.615				0.07
	y	0.332				
Red Sample 2	x	0.601				0.07
	y	0.333				
Red Sample 3	x	0.619				0.06
	y	0.334				
Blue Tolerance Sphere	x	0.078	0.150	0.210	0.137	≥ 0.01
	y	0.171	0.220	0.160	0.038	
Blue Sample 1	x	0.145				0.04
	y	0.152				
Blue Sample 2	x	0.149				0.06
	y	0.151				
Blue Sample 3	x	0.142				0.05
	y	0.137				
Green Tolerance Sphere	x	0.007	0.248	0.177	0.026	≥ 0.03
	y	0.703	0.409	0.362	0.399	
Green Sample 1	x	0.174				0.06
	y	0.423				
Green Sample 2	x	0.174				0.06
	y	0.459				
Green Sample 3	x	0.170				0.07
	y	0.438				
Orange Tolerance Sphere	x	0.631	0.560	0.506	0.570	≥ 0.14
	y	0.369	0.360	0.404	0.429	
Orange Sample 1	x	0.535				0.16
	y	0.406				
Orange Sample 2	x	0.529				0.16
	y	0.411				
Orange Sample 3	x	0.525				0.16
	y	0.403				
Brown Tolerance Sphere	x	0.455	0.523	0.479	0.558	0.03-0.09
	y	0.397	0.429	0.373	0.394	
Brown Sample 1	x	0.509				0.06
	y	0.400				
Brown Sample 2	x	0.494				0.06
	y	0.395				
Brown Sample 3	x	0.506				0.05
	y	0.397				
Grey Tolerance Sphere	x	0.350	0.300	0.285	0.335	0.11-0.18
	y	0.340	0.310	0.325	0.375	
Grey Sample 1	x	0.321				0.18
	y	0.337				
Grey Sample 2	x	0.321				0.16
	y	0.337				
Grey Sample 3	x	0.323				0.15
	y	0.338				