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 **PROCERTUS CE 0965** a exécuté les tâches selon le système 1 et a émis le certificat de constance des performances **0965-CPR-12899/2935**, 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 1 mai 2024

Annexe :

ETA 18-290:

Colours		Chromaticity Coordinates				Luminance Factor ß
		1	2	3	4	
White Tolerance Sphere*	x y	0.305 0.315	0.335 0.345	0.325 0.355	0.295 0.325	≥0.27
Yellow Tolerance Sphere*	x y	0.494 0.505	0.470 0.480	0.513 0.437	0.545 0.454	>0.16
Red Tolerance Sphere*	x y	0.735 0.265	0.700 0.250	0.610 0.340	0.660 0.340	≥0.03
Red on Yellow Tolerance Sphere*	x y	0.735 0.265	0.700 0.250	0.610 0.340	0.660 0.340	≥0.03
Blue Tolerance Sphere*	x y	0.130 0.090	0.160 0.090	0.160 0.140	0.130 0.140	≥0.01
Green Tolerance Sphere*	x y	0.110 0.415	0.170 0.415	0.170 0.500	0.110 0.500	≥0.03
Orange Tolerance Sphere	x y	0.631 0.369	0.560 0.360	0.506 0.404	0.570 0.429	≥0.14
Brown Tolerance Sphere*	x y	0.455 0.397	0.523 0.429	0.479 0.373	0.558 0.394	0.03-0.09
Grey Tolerance Sphere*	x y	0.305 0.315	0.335 0.345	0.325 0.355	0.295 0.325	0.11-0.18
Dark Green Tolerance Sphere	x y	0.313 0.682	0.313 0.453	0.248 0.409	0.127 0.557	0.01-0.07
* 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 ß
		1	2	3	4	
White Tolerance Sphere*	x y	0.355 0.355	0.305 0.305	0.285 0.325	0.335 0.375	≥0.27
Yellow Tolerance Sphere*	x y	0.545 0.454	0.487 0.423	0.427 0.483	0.465 0.534	≥0.16
Red Tolerance Sphere*	x y	0.735 0.265	0.674 0.236	0.569 0.341	0.655 0.345	≥0.03
Red on Yellow Tolerance Sphere*	x y	0.735 0.265	0.674 0.236	0.569 0.341	0.655 0.345	≥0.03
Blue Tolerance Sphere*	x y	0.078 0.171	0.150 0.220	0.210 0.160	0.137 0.038	≥0.01
Green Tolerance Sphere*	x y	0.007 0.703	0.248 0.409	0.177 0.362	0.026 0.399	≥0.03
Orange Tolerance Sphere	x y	0.631 0.369	0.560 0.360	0.506 0.404	0.570 0.429	≥0.14
Brown Tolerance Sphere*	x y	0.455 0.397	0.523 0.429	0.479 0.373	0.558 0.394	0.03-0.09
Grey Tolerance Sphere*	x y	0.350 0.360	0.300 0.310	0.285 0.325	0.335 0.375	0.11-0.18
Dark Green Tolerance Sphere*	x y	0.313 0.682	0.313 0.453	0.248 0.409	0.127 0.557	0.01-0.07
* 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 1	2	3	4	Luminance Factor ß
White Tolerance Sphere*	x y	0.305 0.315	0.335 0.345	0.325 0.355	0.295 0.325	≥ 0.40
Yellow Tolerance Sphere*	x y	0.494 0.505	0.470 0.480	0.513 0.437	0.545 0.454	≥ 0.24
Red Tolerance Sphere*	x y	0.735 0.265	0.700 0.250	0.610 0.340	0.660 0.340	≥ 0.03
Red on Yellow Tolerance Sphere*	x y	0.735 0.265	0.700 0.250	0.610 0.340	0.660 0.340	≥ 0.03
Blue Tolerance Sphere*	x y	0.130 0.090	0.160 0.090	0.160 0.140	0.130 0.140	≥ 0.01
Green Tolerance Sphere*	x y	0.110 0.415	0.170 0.415	0.170 0.500	0.110 0.500	≥ 0.03
Orange Tolerance Sphere*	x y	0.631 0.369	0.560 0.360	0.506 0.404	0.570 0.429	≥ 0.14
Brown Tolerance Sphere*	x y	0.455 0.397	0.523 0.429	0.479 0.373	0.558 0.394	0.03-0.09
Grey Tolerance Sphere*	x y	0.305 0.315	0.335 0.345	0.325 0.355	0.295 0.325	0.11-0.18
Dark Green Tolerance Sphere*	x y	0.313 0.682	0.313 0.453	0.248 0.409	0.127 0.557	0.01-0.07
* 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 1	2	3	4	Luminance Factor ß
White Tolerance Sphere*	x y	0.355 0.355	0.305 0.305	0.285 0.325	0.335 0.375	≥ 0.40
Yellow Tolerance Sphere*	x y	0.545 0.454	0.487 0.423	0.427 0.483	0.465 0.534	≥ 0.24
Red Tolerance Sphere*	x y	0.735 0.265	0.674 0.236	0.569 0.341	0.655 0.345	≥ 0.03
Red on Yellow Tolerance Sphere*	x y	0.735 0.265	0.700 0.250	0.610 0.340	0.660 0.340	≥ 0.03
Blue Tolerance Sphere*	x y	0.078 0.171	0.150 0.220	0.210 0.160	0.137 0.038	≥ 0.01
Green Tolerance Sphere*	x y	0.007 0.703	0.248 0.409	0.177 0.362	0.026 0.399	≥ 0.03
Orange Tolerance Sphere*	x y	0.631 0.369	0.560 0.360	0.506 0.404	0.570 0.429	≥ 0.14
Brown Tolerance Sphere*	x y	0.455 0.397	0.523 0.429	0.479 0.373	0.558 0.394	0.03-0.09
Grey Tolerance Sphere*	x y	0.350 0.360	0.300 0.310	0.285 0.325	0.335 0.375	0.11-0.18
Dark Green Tolerance Sphere*	x y	0.313 0.682	0.313 0.453	0.248 0.409	0.127 0.557	0.01-0.07
* 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 ß
		1	2	3	4	
White *Tolerance Sphere*	x y	*0.305* *0.315*	*0.335* *0.345*	*0.325* *0.355*	*0.295* *0.325*	*≥0.40*
White Sample 1	x y	0.315 0.332				0.44
White Sample 2	x y	0.316 0.333				0.43
White Sample 3	x y	0.315 0.333				0.44
Yellow *Tolerance Sphere*	x y	*0.494* *0.505*	*0.470* *0.480*	*0.513* *0.437*	*0.545* *0.454*	*≥0.24*
Yellow Sample 1	x y	0.481 0.474				0.28
Yellow Sample 2	x y	0,476 0,474				0,28
Yellow Sample 3	x y	0,481 0,486				0,27
Red *Tolerance Sphere*	x y	*0.735* *0.265*	*0.700* *0.250*	*0.610* *0.340*	*0.660* *0.340*	*≥0.03*
Red Sample 1	x y	0.630 0.331				0.07
Red Sample 2	x y	0.625 0.332				0.07
Red Sample 3	x y	0.637 0.331				0.07
Blue *Tolerance Sphere*	x y	*0.130* *0.090*	*0.160* *0.090*	*0.160* *0.140*	*0.130* *0.140*	*≥0.01*
Blue Sample 1	x y	0.141 0.130				0.04
Blue Sample 2	x y	0.146 0.139				0.06
Blue Sample 3	x y	0.141 0.129				0.05
Green *Tolerance Sphere*	x y	*0.110* *0.415*	*0.170* *0.415*	*0.170* *0.500*	*0.110* *0.500*	*≥0.03*
Green Sample 1	x y	0.169 0.438				0.06
Green Sample 2	x y	0.166 0.476				0.05
Green Sample 3	x y	0.160 0.448				0.06
Orange *Tolerance Sphere*	x y	*0.631* *0.369*	*0.560* *0.360*	*0.506* *0.404*	*0.570* *0.429*	*≥0.14*
Orange Sample 1	x y	0.546 0.404				0.16
Orange Sample 2	x y	0.544 0.407				0.15
Orange Sample 3	x y	0.527 0.397				0.16

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

1.2 Daylight Chromaticity and Luminance Factor, after accelerated artificial weathering

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