

Technical Data Sheet

EuraTex HDP 2L / 3L Fine / Rough (Protec)(Design) on aluminium substrate

Version 2021-1

EuraTex HDP products are two (primer + topcoat) or three (primer + basecoat + topcoat) layer systems offering a smooth (Fine) or textured (Rough) finish. They are coil coated on aluminium substrates pre-treated with a chrome-free conversion layer. A third Design layer is optional to obtain certain aesthetic features; possibly including a (Mica) sparkle effect due to inert, non-conductive mica flakes. An optional Protec consists of an extra high build primer that improves corrosion resistance.

Substrate & pre-treatment						
Width	≤ 1620mm					
Thickness aluminium	0,3-2,0mm					
Pre-treatment	Chrome-free conversion					
Substrate (alloy, temper)	3000 , 4000, 5000 series (H4x) EN 573-3					
Front side finish		EN 1396				
Resin chemistry	HDP 2L: Primer + HDP TEX or Design HDP 3L: Primer + PE HDP Basecoat + PE HDP (Mica) TEX Clearcoat					
Film thickness (2L= 2 Layers)	1L	2L	3L	4L		
Fine = Smooth textured finish	-	25-31µm	37-47µm	-		
Fine in Protec build-up ⁽¹⁾	-	30-36µm	42-52µm	-		
Rough = Rough textured finish	-	27-33µm	-	-		
Rough in Protec build-up ⁽¹⁾	-	32-38µm	-	-		
(Ultra) Rough + (Mica) Design = Rough texture + Decorline step	-	-	37-47µm +8-12µm design	-		
(Ultra) Rough + (Mica) Design Protec ⁽¹⁾	-	-	42-52µm +8-12µm design	-		
EN 13523-1						
Colour match	Solid colours: ΔE(cmc) ≤ 1 Metallics / Mica versions: Visual OK ⁽²⁾ EN 13523-3; EN 13523-22					
Specular gloss	0-5 gloss units (acc. to EN 1396 Table 3) EN 13523-2					
Pencil hardness	≥ HB EN 13523-4					
Adhesion	≤ GT1 NEN-EN-ISO 2409					
Adhesion + rapid deformation indentation	≤ GT1 EN 13523-6					
Resistance to cracking on bending (T-Bend test on non-embossed material) ⁽³⁾	Temper	≤ H44	H46	H48		
		≤ 1,5T	≤ 2,0T	≤ 2,5T		
	EN 13523-7					
Resistance to MEK solvent (rubbing test)	≥ 100 double rubs EN 13523-11					
Durability according to testing						
Colour and gloss retention on xenon exposure ⁽⁴⁾	ΔE(cmc) ≤ 5 ≥ 50% gloss retention ISO 16474-2 2000 hours					
Humidity resistance	Blistering: < B2 (S2) ISO 6270-1 1000 hours					

Filiform corrosion resistance	Class 3 Under creep longest filament: $\leq 3\text{mm}$ ISO 4623-2 1000 hours	
Resistance to salt spray fog	Class 3 Under creep average: $\leq 2\text{mm}$ Blistering: $\leq B2$ (S2) EN 13523-8 1000 hours	
Resistance to fluorescent UV light and water condensation	R_{UV4} $\Delta E(\text{cmc}) \leq 2$ $\geq 80\%$ gloss retention EN 13523-10 2000 hours	
Durability according to outdoor exposure		
Outdoor corrosion resistance	Class 3 Under creep average: $\leq 2\text{mm}$ Blistering: $\leq B2$ (S2) EN 13523-21 3 years 90° North Seaside Bohus-Malmö	
Colour and gloss retention on natural weathering ⁽⁴⁾	$\Delta E \leq 5$ $\geq 50\%$ gloss retention EN 13523-21 2 years 45° South Florida	
Resistance to chalking on natural weathering ⁽⁴⁾	$\leq 10\%$ EN 13523-21 2 years 45° South Florida	
Warranty indication (final warranty upon request)		
Technical warranty ⁽⁵⁾	Non coastal	Coastal ⁽⁶⁾
HDP 2L (all versions)	20 year	Not granted
HDP 3L (all versions)	20 year	Not granted
Aesthetical warranty ⁽⁷⁾	Zone A: 7 years Zone B: 5 years Zone C: 3 years	

⁽¹⁾ Protec is a high build primer (10µm) that improves corrosion resistance in extreme environments (coastal, airports, chemical industry etc.)

⁽²⁾ All textured colours are batch and paint directional sensitive. Material for a building project must be ordered in one batch and should be installed in the same paint direction

⁽³⁾ The minimum flexibility depends on the coated substrate

⁽⁴⁾ Indicative values only. The UV durability performance will depend on the colour saturation/ type (e.g. light vs bright, solid finishes vs metallic)

⁽⁵⁾ The original paint surface that is directly exposed to the elements will not peel, blister, chip, check or crack (except for the minor cracking that may occur on edges or break bends at the time of fabrication) over more than 5% of the total surface over the technical warranty period. The technical warranty value will be equivalent to a maximum of 100% of the purchase price according to Euramax Coated Products terms and conditions

⁽⁶⁾ Coastal areas are located within 1500 meter from a salt water environment. For coastal areas we recommend an extra gauge (Protec) primer layer

⁽⁷⁾ The aesthetical warranty conditions will depend on the colour and the project location (see appendix A, B and C for more details on aesthetic warranty)

Appendix A: Geographical warranty zones depending on Northern Latitude (NL) and Southern Latitude (SL)



Zone A: All countries situated > 45° NL and > 45° SL (e.g. Scandinavia, Great Britain, the Netherlands, Belgium, France, Switzerland, Austria, Germany)

Zone B: All countries situated between 45° and 30° NL and between 45° and 30° SL (e.g. France, Portugal, Spain, Italy, Greece, Turkey)

Zone C: All countries situated < 30° NL and < 30° SL (e.g. Guadeloupe, Cameroon, Saudi Arabia, Oman)

Appendix B: Aesthetic performance overview per geographical zone

Topcoat performance	Test specification	Zone A 10 years	Zone B 7 years	Zone C 5 years
		Standard	Standard	Standard
Reduction in dry film thickness	EN 13523-1	≤ 4µm	≤ 4µm	≤ 5µm
Residual gloss	EN 13523-2	≥ 80%	≥ 70%	≥ 65%
Colour diff. ΔE for solid colours	EN 13523-3	≤ 5	≤ 6	≤ 7
Chalking %	ASTM D659-80	≤ 20	≤ 40	≤ 40

Appendix C: Aesthetic warranty value reduction over warranty period

Limited aesthetic warranty value over warranty period; % of full warranty refund					
3 Year	Year 1	Year 2	Year 3		
	100%	50%	20%		
5 Year	Year 1-2	Year 3	Year 4	Year 5	
	100%	50%	25%	10%	
7 Year	Year 1-3	Year 4	Year 5	Year 6	Year 7
	100%	80%	60%	40%	20%