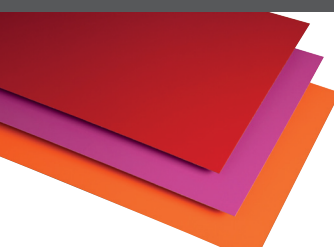


POLYREY HPL® High Pressure Laminate



Conforms EN 438-3

| CHARACTERISTICS | DECOR / FINISH | | All except Pearlescent decors, EPM and BUBBLES | Pearlescent decors, EPM and BUBBLES | Digital Signature |
|-----------------|---|-------|--|-------------------------------------|-----------------------|
| | STANDARD | UNITS | | | |
| THICKNESS | 0.8 mm (except BRIHG 1 mm) | | | | |
| GRADE | Standard - Postforming - Fire retardant | | | Standard - Fire retardant | |
| CLASSIFICATION | HGP - HGS - HGF | | VGP - VGS - VGF | | HGS - HGF - VGS - VGF |

Physical and dimensional properties

| CHARACTERISTICS | STANDARD | UNITS | HGP - HGS - HGF | VGP - VGS - VGF | HGS - HGF - VGS - VGF |
|---|---------------|-------------------|------------------|------------------|-----------------------|
| Density | EN ISO 1183-1 | g/cm ³ | ≥ 1.35 | ≥ 1.35 | ≥ 1.35 |
| Thickness tolerance | EN 438-2-5 | mm | ± 0.1 | ± 0.1 | ± 0.1 |
| Length and width tolerance | EN 438-2-6 | mm | - 0 / + 10 | - 0 / + 10 | - 0 / + 10 |
| Straightness tolerance | EN 438-2-7 | mm/m | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 |
| Squareness tolerance | EN 438-2-8 | mm/m | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 |
| Flatness tolerance | EN 438-2-9 | mm/m | 60 | 60 | 60 |
| Dimensional stability at high temperature - Longitudinal - Transverse | EN 438-2-17 | % | ≤ 0.55 ≤ 1.05 | ≤ 0.75 ≤ 1.25 | ≤ 0.55 ≤ 1.05 |

Mechanical properties

| CHARACTERISTICS | STANDARD | UNITS | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | HGS - HGF - VGS - VGF : 20 |
|--|-------------|----------------------|---------------------------|---------------------------|----------------------------|
| Resistance to boiling water | EN 438-2-12 | Class ^(a) | BRIHG: 3 /Others: 4 | BRI : 3 /Others: 4 | 1 |
| Impact resistance (small diameter ball) | EN 438-2-20 | N | ≥ 20 | ≥ 15 | ≥ 20 |
| Impact resistance (large diameter ball) (drop height for ≤ 10mm diameter imprint) | EN 438-2-21 | mm | ≥ 800 | ≥ 600 | ≥ 800 |
| Resistance to cracking | EN 438-2-23 | Class ^(a) | 4 | 4 | 4 |
| Minimum bending radius (convex and concave) | | cm | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | 20 |

Surface properties

| CHARACTERISTICS | STANDARD | UNITS | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | HGS - HGF - VGS - VGF : 20 |
|---|-------------|--|-------------------------------|---------------------------|----------------------------|
| Surface defects - Spots - Linear | EN 438-2-4 | mm ² /m ² mm/m ² | ≤ 1 ≤ 10 | ≤ 1 ≤ 10 | ≤ 1 ≤ 10 |
| Abrasion resistance (initial point) | EN 438-2-10 | No. of revolutions | GRANIT : ≥ 450 /Others: ≥ 150 | EPM : ≥ 100 /Others: ≥ 50 | ≥ 150 |
| Resistance to steam | EN 438-2-14 | Class ^(a) | BRIHG: 3 /Others: 4 | BRI : 3 /Others: 4 | 1 to 4 depending on DECOR |
| Dry heat resistance 180 °C | EN 438-2-16 | Class ^(a) | BRIHG: 3 /Others: 4 | BRI : 3 /Others: 4 | BRI : 3 /Others: 4 |
| Resistance to humidity | EN 12721 | Class ^(a) | BRIHG: 3 /Others: 4 | BRI : 3 /Others: 4 | BRI : 3 /Others: 4 |
| Scratch resistance | EN 438-2-25 | Grade ^(b) | BRIHG: 2 /Others: 3 | BRI : 2 /Others: 3 | BRI : 2 /Others: 3 |
| Stain Resistance - Groups 1 & 2 - Group 3 | EN 438-2-26 | Class ^(a) | 5 4 | 5 4 | 5 4 |
| Colour fastness under artificial light | EN 438-2-27 | Grayscale | 4 to 5 | 4 to 5 | 4 to 5 |
| Resistance to cigarette burns | EN 438-2-30 | Class ^(a) | 3 | 3 | 3 |

Postforming properties (Postforming HPL only)

| CHARACTERISTICS | STANDARD | UNITS | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | HGS - HGF - VGS - VGF : 20 |
|----------------------------|-------------------|--------|---------------------------|---------------------------|----------------------------|
| Minimum Postforming radius | EN 438-2-31 or 32 | mm | Th. 0,8 mm ≥ 8 mm | Th. 0,8 mm ≥ 8 mm | - |
| Blister resistance | EN 438-2-33 or 34 | second | ≥ 15 | ≥ 15 | - |

Fire performance

| CHARACTERISTICS | STANDARD | UNITS | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | HGS - HGF - VGS - VGF : 20 |
|-----------------|-------------|------------------|----------------------------------|----------------------------------|-------------------------------------|
| Fire rating | NFP 92-501 | M Classification | Fire retardant: M1 Others: M3 | Fire retardant: M1 Others: M3 | Fire retardant: M1 Standard : M3 |
| Calorific value | EN ISO 1716 | MJ/kg | 18 - 20 | 18 - 20 | 18 - 20 |

Health and environmental characteristics

| CHARACTERISTICS | STANDARD | UNITS | HGP : 10 / HGS - HGF : 20 | VGP : 10 / VGS - VGF : 20 | HGS - HGF - VGS - VGF : 20 |
|---|-------------|----------------|---------------------------|---------------------------|----------------------------|
| Food safe | EN 13130-1 | | Yes | Yes | Yes |
| Formaldehyde emission | EN 717-2 | Class | E1 | E1 | E1 |
| Volatile organic compounds (VOC) emission | ISO 16000-9 | Class | A | A | A |
| Antibacterial properties | JIS Z 2801 | Reduction in % | > 99.9 | > 99.9 | > 99.9 |

HGP : Horizontal Grade Postforming
HGS : Horizontal Grade Standard
HGF : Horizontal Grade Fire retardant grade

VGP : Vertical Grade Postforming
VGS : Vertical Grade Standard
VGF : Vertical Grade Fire retardant grade

^(a) Class : 1= Surface damage, 2= Severe appearance alteration, 3= Moderate change, 4= Slight change visible from certain angles, 5= No change.
^(b) Grade: 2= Continuous scratches at 2N, 3= Continuous scratches at 4N.