

# FEBRUARY 2013 MATERIALS UPDATE

## Material ConneXion®

As part of our promise to provide our clients with the newest and most innovative materials sourced from around the world, we are pleased to present our monthly Materials Update. Here you will find the latest materials to have been added to the database, upon their acceptance by our regular jury process.

These materials can be seen online and on-site at our New York location. Selected materials are also available at our Cologne, Daegu, Milan, and Bangkok locations; please call or email us at any of the addresses listed for more information.

Interested in these materials but not a client? Our subscription-based Materials Library is the world's largest library of advanced, innovative and sustainable materials and processes. With 45-60 new materials added every month, our libraries around the world give you immediate access to 7,000+ materials onsite and online, Material Specialists and Monthly Updates on what's new.

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## CATEGORY INDEX

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Process

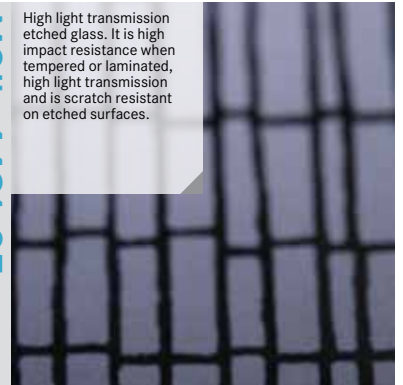
MC#: 0105-12

Decorative high pressure laminate (HPL) composed of 70% wood fibers and 30% resins. Applications include residential and commercial furniture, fixtures, casework, columns, wainscoting, interior doors or divider systems.



MC#: 4491-05

High light transmission etched glass. It is high impact resistance when tempered or laminated, high light transmission and is scratch resistant on etched surfaces.



MC#: 4491-06

Etched glass sheets with a "tone on tone" ceramic enamel with or without front or back surface etching. Applications include interior partitions, furniture, doors and façade coverings.



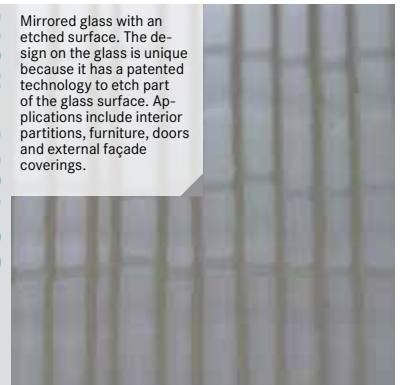
MC#: 4491-07

Satin finished, etched mirrored glass designed to reflect light. It is high impact resistance when tempered or laminated, high light transmission, scratch resistant on etched surfaces and has high-light reflection. Used for furniture, doors and façade coverings.



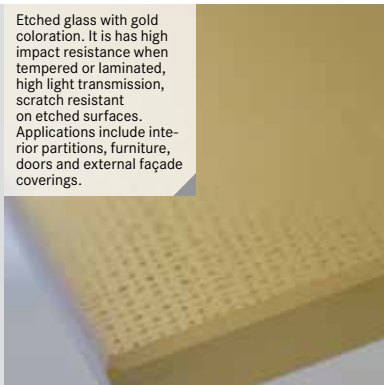
MC#: 4491-08

Mirrored glass with an etched surface. The design on the glass is unique because it has a patented technology to etch part of the glass surface. Applications include interior partitions, furniture, doors and external façade coverings.



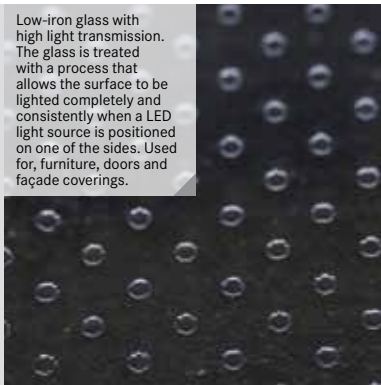
MC#: 4491-09

Etched glass with gold coloration. It has high impact resistance when tempered or laminated, high light transmission, scratch resistant on etched surfaces. Applications include interior partitions, furniture, doors and external façade coverings.



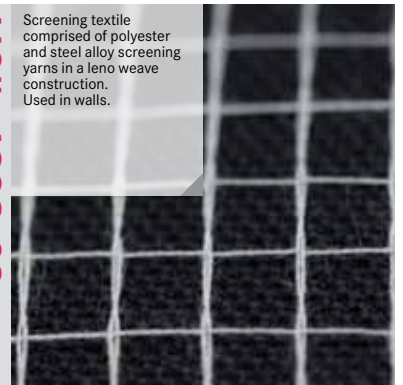
MC#: 4491-10

Low-iron glass with high light transmission. The glass is treated with a process that allows the surface to be lighted completely and consistently when a LED light source is positioned on one of the sides. Used for, furniture, doors and façade coverings.



MC#: 4832-03

Screening textile comprised of polyester and steel alloy screening yarns in a leno weave construction. Used in walls.



MC#: 4832-04

Screening textile for electromagnetic waves (EMI) composed of cotton and metallic alloy screening yarn. Used in garments.



MC#: 4832-05

Screening textile for electromagnetic waves (EMI) comprised of polyester, steel alloy and shantung "nubby" screening yarn. Used in curtains.



MC#: 5047-04

Highly reflective aluminum sheet with a textured surface. It has a total reflection in the visible range above 95% and up to 99%, anti-scratch and anti-static qualities, and resistance to humidity and tarnishing. Used in lighting, and display screen illumination.



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**MC#:** 5047-05

Polished and anodized aluminum sheets whose color is consistent and stable over time. This material is recyclable, light, antistatic, scratch and fingerprint resistant. Applications include surface treatments.



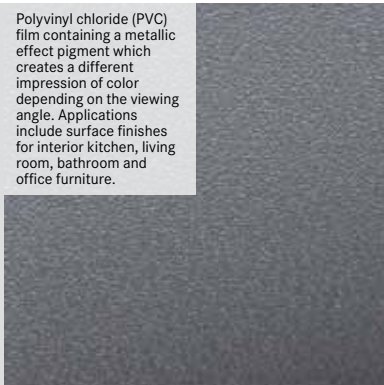
**MC#:** 5047-06

Pre-anodized aluminum sheet which is reflective, durable, lightweight, fully recyclable, and resistant to dirt pick-up. It is subjected to an electrochemical brightening process, then anodizing which creates an oxide layer on the surface of the metal. Used in reflector materials.



**MC#:** 5597-17

Polyvinyl chloride (PVC) film containing a metallic effect pigment which creates a different impression of color depending on the viewing angle. Applications include surface finishes for interior kitchen, living room, bathroom and office furniture.



**MC#:** 5597-18

Polyvinyl chloride (PVC) film which mimics the grain and texture of natural oak wood through the combination of color, embossing and matte/gloss finishes. Applications include surface finishes for interior timber kitchen, living room, bathrooms.



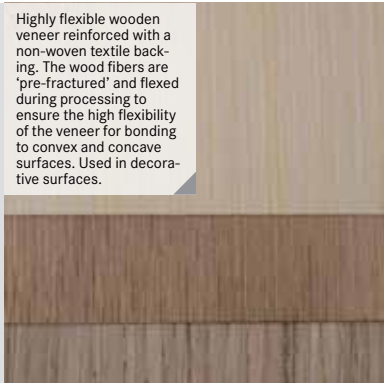
**MC#:** 6022-03

Cast acrylic PMMA (polymethyl methacrylate) sheets with decorative inclusions and surface applique. Applications include furniture, POP displays, signs, interior elements and store display.



**MC#:** 6219-02

Highly flexible wooden veneer reinforced with a non-woven textile backing. The wood fibers are 'pre-fractured' and flexed during processing to ensure the high flexibility of the veneer for bonding to convex and concave surfaces. Used in decorative surfaces.



**MC#:** 6549-03

Plain woven fabric composed of 60% pure new wool and 40% hemp. This fabric is inherently flame retardant and is made from rapidly renewable and compostable materials. Applications include contract upholstery such as seating.



**MC#:** 6769-02

Multi-color metal sheets produced by a multi-layer screen printing process of color, pattern, and texture. This material does not affect indoor air quality through off gassing and does not contain any volatile organic compounds (VOCs).



**MC#:** 6868-02

Elastomer mesh comprised of monofilament polyester and monofilament elastomer in a 2 x 2 twill weave construction. Applications include bags.



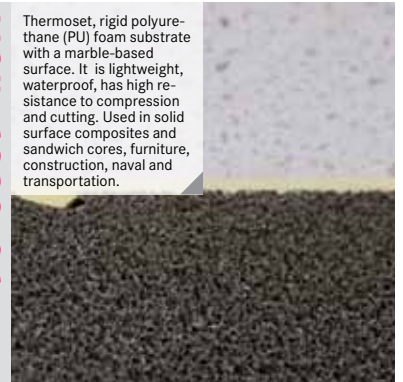
**MC#:** 6890-05

Thermosetting, rigid polyurethane (PU) foam sandwiched between two medium density fiberboard (MDF) sheets. Applications include lightweight solid surface composites and sandwich cores.



**MC#:** 6890-06

Thermoset, rigid polyurethane (PU) foam substrate with a marble-based surface. It is lightweight, waterproof, has high resistance to compression and cutting. Used in solid surface composites and sandwich cores, furniture, construction, naval and transportation.





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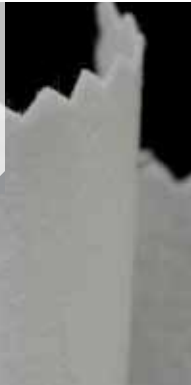
Ceramic

Natural

Process

MC#: 6971-05

100% cellulosic, segmented hollow viscose (rayon) fiber which is collapsed in the dry state and swells when wet. This fiber is superior to cotton and standard viscose as it exhibits enhanced water absorption and high water retention.



MC#: 7018-01

Cold-rolled, heat-treated steel that is fabricated through a continuous annealing line process to increase durability. It is finished by electrogalvanizing the steel to protect against corrosion. Used in side impact beams, bumpers, seats and structural components.



MC#: 7018-03

Highly abrasion resistant steel. The material has good forming and welding properties along with having high strength capacity. Applications are components and structures subject to wear.



MC#: 7019-01

High performance, lightweight, natural fiber composite made from 35% lignocellulose fiber, 57% polypropylene (PP) and 8% additives. Applications are for consumer and industrial products.



MC#: 7018-02

Hot rolled, superior strength, cold forming steel. This material consists of low levels of carbon, manganese, and grain refiners such as niobium, titanium or vanadium. Applications are for truck chassis, cranes and earthmoving machines.



MC#: 7020-01

Activated carbon cloth from cellulosic-based fibers. The material has high porosity, high surface area for greater filtration, good air permeability, and is odor absorbent. Used in face masks, odor filtering for automobiles and appliances.



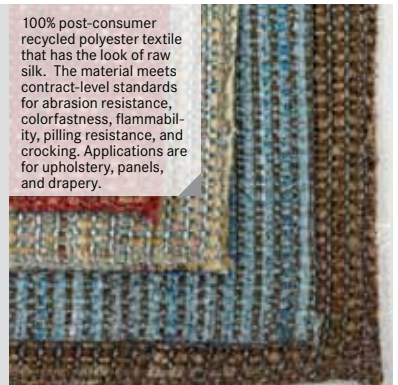
MC#: 7023-01

A process to heat treat finnish spruce wood that gives it exceptional stability, durability and thermal insulation properties. Applications are for construction and furniture.



MC#: 6304-03

100% post-consumer recycled polyester textile that has the look of raw silk. The material meets contract-level standards for abrasion resistance, colorfastness, flammability, pilling resistance, and crocking. Applications are for upholstery, panels, and drapery.



MC#: 7025-01

Embossed 100% polyester (PET; polyethylene terephthalate) velvet textile with PVC (polyvinyl chloride) backing. The addition of a PVC backing increases thickness, weight, and durability. Used in packaging, bags, boxes, household goods, and POP displays.



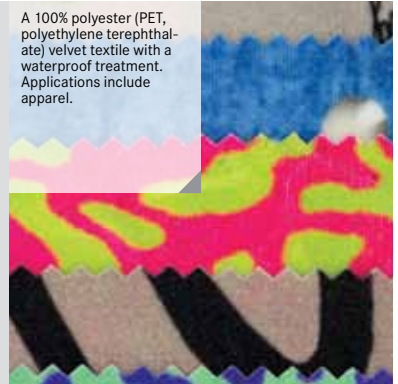
MC#: 7025-02

A 100% polyester (PET, polyethylene terephthalate) velvet textile with a dynamic color shift effect. This fabric exhibits a color shift effect by paring a colored ground, with a black pile. Used in apparel, interior design, decorative objects, luxury packaging, and linings.



MC#: 7025-03

A 100% polyester (PET, polyethylene terephthalate) velvet textile with a waterproof treatment. Applications include apparel.



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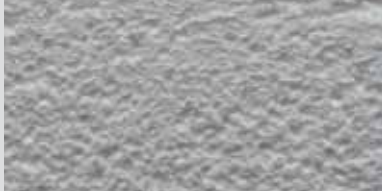
Ceramic

Natural

Process

MC#: 7026-01

Insulating panels composed of an expanded polystyrene (EPS) core sandwiched between an epoxy/glass fiber composite. It is light-weight, has a high flexural strength and contains no volatile organic compounds.



MC#: 7026-02

Fiber reinforced polymer laminate composed of glass fiber fabric (40-70%) and modified epoxy resin (60 - 30%). This material can replace metals to provide lower weight parts with the same strength or modulus. Used in electronics housings and structural parts.

