



PVC RIGID PLATE
PVC INTEGRAL SKIN-FOAM PLATE
PVC RIGID FOAM HONEYCOMB PLATE
A-PET RIGID SHEET
CEILING BOARD



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UNIQUE PLASTICS CORPORATION

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PVC RIGID PLATE



CLEAR & TINT TRANSPARENT PLATE

◆ CHARACTERISTICS

- (1) Good transparency: PVC resin itself has good transparency. The PVC products can be applied to the goods which demand better transparency.
- (2) Various kinds of colors can be blended according to the client's demand without affecting transparency.
- (3) It is convenient for the embossing work so that products can be used in various applications.
- (4) It is compatible with the ink, which becomes the good material in the printing work.
- (5) The product is easily processed. The processing methods on the PVC plate is very similar to that of acrylic. All existing processing equipment for acrylics may be used on processing PVC plate.



◆ APPLICATIONS

- (1) For decoration purpose:
Face plate for photograph frames, material for jewelry processing, transparent box, jewelry case, show rack. etc.
- (2) For special purpose:
Screen printing, nameplate, color painting, relief sculpture, partition sheets for indoor use...etc.
- (3) Thermoforming:
Thermoforming in the processing work can be made to meet the demand.
- (4) On motorcycles:
Can be used as windshield plate.



◆ SPECIFICATIONS

| Item | Ordered products | Regular products |
|----------------|---|---|
| Thickness (mm) | 0.5, 0.8, 1.0, 1.2, 1.5, 1.8, 2.0, 3.0 4.0, 5.0, 6.0, 8.0, 10.0, | 0.8, 1.0, 1.2, 1.5, 1.8, 2.0, 2.5 3.0, 4.0, 5.0, 6.0, 8.0, 10.0, |
| length × width | 915mm × 1830mm, 1000mm × 2000mm, 1220mm × 2440mm | 1000mm × 2000mm, 1220mm × 2440mm |
| colors | Clear and any color tint | Clear and any color tint |

■ COLOR

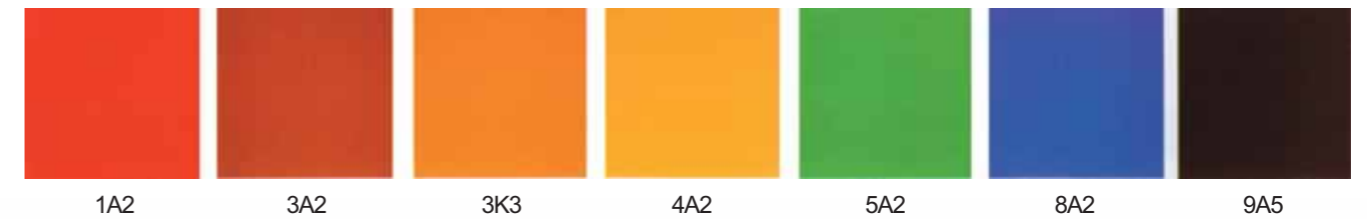


PLATE FOR DECORATION

◆ CHARACTERISTICS

- (1) A great variety of beautiful colors available through strict selection. They can be used with plain surface or be embossed.
- (2) It has the excellent impact resistance. It will not break upon being hit or slightly collided.
- (3) It is easily processed, and can be bonded with the instantaneous PVC adhesive.
- (4) Lustrous surface and beautiful appearance.

◆ SPECIFICATIONS

| Item | Ordered products | Regular Products |
|----------------|--|-------------------------------|
| Thickness (mm) | 1.0, 1.5, 2.0, 3.0, 4.0, 10.0 | 1.0, 1.5, 2.0, 3.0, 4.0, 10.0 |
| length × width | 915mm × 1830mm, 1000mm × 2000mm, 1220mm × 2440mm | 1220mm × 2440mm |
| colors | Clear and any color tint | Clear and any color tint |

■ COLOR



PVC FOAMED PLATE

◆ CHARACTERISTICS

- (1) Light-weight, bright, abrasive-resistant, corrosion resistant, chemical-proofing and water-proofing, reusable.
- (2) Moisture and vapor-resistant, anti-insects, superb in long time storage.
- (3) Smooth surface, non-decoloration, easy for washing, weather-proofing, good insulation.
- (4) Low specific gravity, easy for installation, saving in time and labor, excellent in acoustic effect.

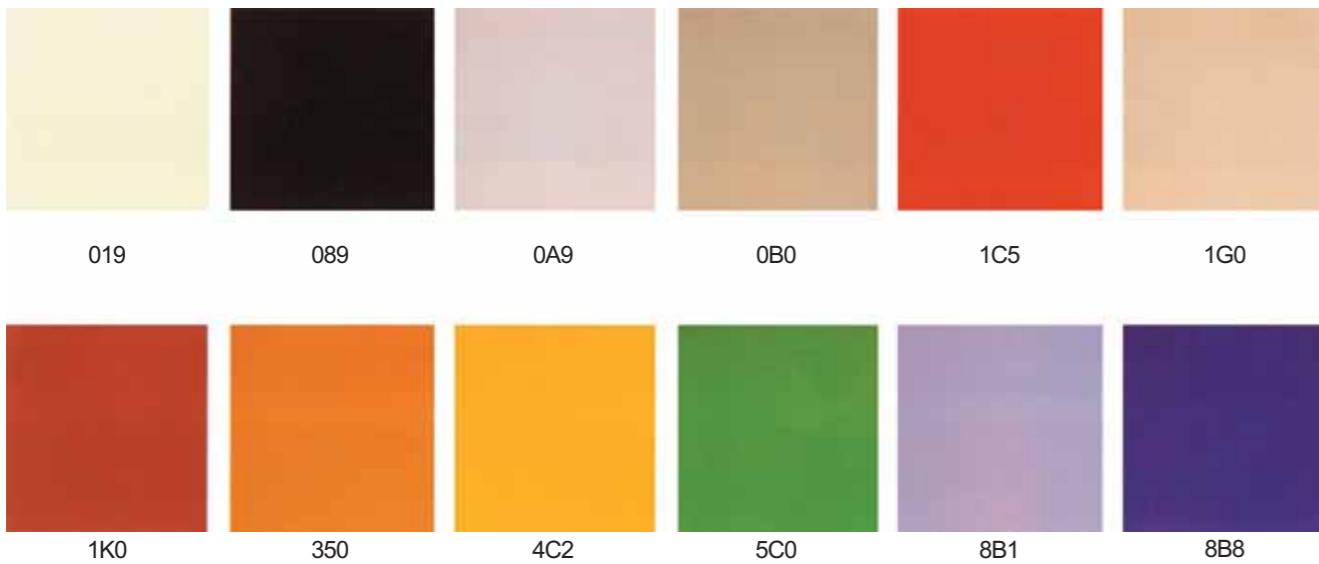
◆ APPLICATIONS

- (1) Used as the wall finish of partition for residence, office and public utilities.
- (2) Used as door panel for bath room, inner wall of building, high-raised floor and pre-fabricated house.
- (3) Door panel of room, dust free room, and curtain wall.
- (4) Partition of front screen, high-grade table surface, and corrosion-proof engineering.
- (5) Flat board for screen printing, signboard for advertisement, signboard for building material and signboard for landscape.
- (6) Base board for picture frame, and insulation for barn and laboratory.
- (7) Cooling insulation material for container, freezer, vessel, fishing boat, and yacht.
- (8) Wall material for cooling storage and cooling conduct.
- (9) Partition board for supermarket, bracket of department store, various cabinet board of furniture.
- (10) Other usages: form panel, ditch panel, spots material, aquicultural material, wave-resistant on seashore, water-proofing material, artful board, and convenient partition board.

◆ PRODUCTS SPECIFICATIONS

| Item | Ordered products | Regular Products Specifications |
|-------------------|---|--|
| (mm) Thickness | 1.0, 1.5, 2.0, 3.0, 4.0, 10.0 | 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0 |
| length X width | 3' X 6', 1M X 2M, 4' X 8' | 3' X 6', 4' X 8' |
| colors | 017, 019, 0A7, 0A9, 4C0, 350 5C0, 1C5, 1G0, 1K0, 5C1, 8B1 089, 0B0, 0B6, 8B8, 4C2 | 017, 089, 0A9, 4C0, 5C0, 0B0, 1C5, 1G0, 1K0, 5C1, 8B8 |

COLOR



PVC FOAMED EMBOSSED PLATE

◆ CHARACTERISTICS

- (1) All PVC plates made by our company can be embossed.
- (2) After the plate is embossed, different kinds of effects can be produced.
- (3) All embossing patterns are carefully selected. They are good looking, practical and elegant, adding value to PVC plates.

◆ CATEGORIES & APPLICATIONS

| Embossing Roller No. | Application |
|----------------------|---|
| #738 | Fluorescent lamp plat, ornamental plate, partition plate. |
| #879 | Ornamental plate, plate for mirror frame. |
| #922 | For various uses. |

◆ EMBOSMENT GROOVES



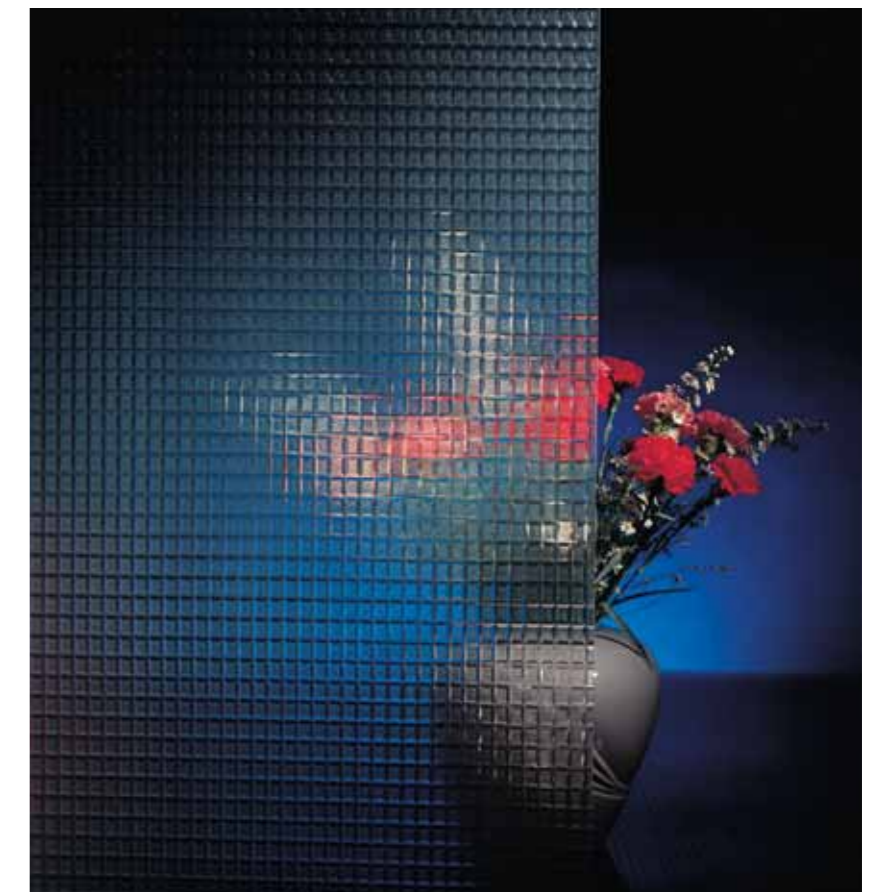
738



742



922



PVC INDUSTRIAL PLATE

◆ CHARACTERISTICS

(1) Excellent corrosion resistability:

The rigid PVC plates features particularly strong chemical and corrosion resistability, which best suits corrosion resistance equipment in chemical industry.

(2) Easy processing:

The PVC plates are susceptible to cutting, welding and bending. It can be easily torned to meet various applications without calling for special tools or technology.

(3) Strong durability:

Due to its toughness, lightness and resilience, its durability excels any other plastic materials.

(4) Reasonably pricing:

The rigid PVC plates are the most ideal corrosion resistance materials for industrial purposes. As they reasonably priced, and their processing cost is low.

◆ APPLICATIONS

(1) Chemical industry:

In alkali or acid production tower, alkali or acid washing tower, chemical liquid storing barrel, tank, Oil tank, storing tank for brewing water, acid-alkali synthetic tower and photograph developing in struments.

(2) General industry:

In cooling tower, air washer, cover for ventilator, water tank, combined dust remover, lining of cement tank and windshield for motorcycie.

(3) Electrification and Electrical industry:

In electrolytic tank, battery box, electrometer plate, upper cover of sound system set, under plate for radio set as well as various plates for electrical insulation.

(4) Air conducting pipe engineering:

In such air conducting or exhausting engineerings as high (low) speed air conducting, central system air conducting. Intake (Exhaust) air conducting, and cycling air conducting engineering operations.

(5) Others:

In stationery, materials, building and miscellaneous processings.

◆ PRODUCTS SPECIFICATIONS

| Item | Ordered products (For Ordinary, For Impact Resist, Heat Resistance) | Regular Products | |
|---------------------|---|--|---|
| | | For Ordinary | For Impact Resistance |
| Thickness (mm) | 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0, 12.0, 15.0, 20.0 | 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0, 12.0, 15.0, 20.0 | 1.5, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0, 12.0 |
| length × width (mm) | 915mm × 1830mm, 1000mm × 2000mm, 1220mm × 2440mm | 1220mm × 2440mm | 1220mm × 2440mm |
| colors | 023, 0B2, 430, 01F, 4F0, 4F3, 4BY, 455, 855, 7E0 | 023 | 4BY, 855, 4F0, 922 |

■ COLOR



◆ CHEMICAL-RESISTANT PROPERTIES

| Name of chemical | Temperature (°C) | | | Name of chemical | Temperature (°C) | | |
|-----------------------|------------------|----|----|--|------------------|----|----|
| | 20 | 40 | 60 | | 20 | 40 | 60 |
| Hydrochloric Acid 35% | ◎ | ◎ | ◎ | Petrol | ◎ | ◎ | ◎ |
| Sulfuric Acid 60% | ◎ | ◎ | ◎ | Glycerin | ◎ | ◎ | ◎ |
| Nitric Acid 70% | ◎ | ◎ | ▲ | Solution of spraying paints | × | × | × |
| Formic Acid 100% | ◎ | ▲ | × | Chlorine (Gus, dried) 100% | × | × | × |
| Lactic Acid | ◎ | ◎ | ◎ | Ammonia and other waste, gases | ◎ | ◎ | ▲ |
| Caustic Soda | ◎ | ◎ | ◎ | Natural Gas | ◎ | ◎ | -- |
| Ammonia Water | ◎ | ◎ | ◎ | Coal Gas | ▲ | ▲ | -- |
| Sodium Disulfide | ◎ | ◎ | × | Bleaching Solution | ◎ | ◎ | -- |
| Acetone | × | × | × | Electro-plating liquid | ◎ | ◎ | ▲ |
| Ethyl Alcohol | ◎ | ◎ | ▲ | Developing (tixing liquid for photographing) | ◎ | ◎ | -- |
| Butyl Alcohol | ◎ | ◎ | ▲ | Sea water, Salt water | ◎ | ◎ | ◎ |
| Benzene | × | × | -- | Fermented Alcohol | ◎ | ▲ | -- |
| Formalin | ◎ | ◎ | ▲ | Starch (carbohydrate) Solution | ◎ | ◎ | ◎ |
| Carbon Disulfide | × | -- | -- | Brewing water | ◎ | ◎ | ◎ |

REMARKS: ◎ denotes safety applicable (absolutely corrosion-resistant)

▲ denotes applicable (corrosion-resistant)

× denotes inapplicable



◆ PHYSICAL PROPERTIES

| Item | Testing method | Unit | Transparent plate | Decoration plate | High-Impact plate | Ordinary plate | Foamed plate | |
|---|--------------------------------------|-----------------------|--------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Physical Properties | Specific gravity | ASTM D792 | -- | 1.37 | 1.41 | 1.41 | 1.43 | 0.72 |
| | Tensile strength | ASTM D638 | kg/cm ² | 500 ↑ | 500 ↑ | 400 ↑ | 500 ↑ | 100 ↑ |
| | Tensile modulus of Elasticity | ASTM D638 | X10 ¹⁴ kg/cm ² | 3.5 ↑ | 2.8 ↑ | 2.7 ↑ | 3.5 ↑ | 5.4 ↑ |
| | Falling ball test (Below 2mm (t) ↓) | CNS 3142 | | Unbreakable | Unbreakable | Unbreakable | Unbreakable | -- |
| | (CHARPY) Impact strength | ASTM D256 | kg.cm/cm ² | 2.0 ↑ | 3 ↑ | 13 ↑ | 3.0 ↑ | 1.0 ↑ |
| | Heat properties | Softening temperature | CNS 3142 | °C | 50 ↑ | 60 ↑ | 55 ↑ | 60 ↑ |
| (264PSI) Heating deflection temperature | | ASTM D648 | °C | 52 ↑ | 62 ↑ | 57 ↑ | 62 ↑ | 52 ↑ |
| Flexibility shrinkage after heating | | JIS K6745 | % | thicker than 0.81m/m | thicker than 0.81m/m | thicker than 0.81m/m | thicker than 0.81m/m | thicker than 0.81m/m |
| | | | | ± 5 ↓ | ± 5 ↓ | ± 5 ↓ | ± 5 ↓ | ± 10 ↓ |
| Flammability resistance | | ASTM D635 | -- | Selt extinguishable | Selt extinguishable | Selt extinguishable | Selt extinguishable | Selt extinguishable |
| | | UL-94 | -- | VO | -- | -- | -- | VO |
| Electrical properties | Dimension original volume resistance | ASTM D257 | Ω cm | 3~5 × 10 ¹⁶ | 3~5 × 10 ¹⁶ | 3~5 × 10 ¹⁶ | 3~5 × 10 ¹⁶ | 3~5 × 10 ¹⁶ |
| | Insulation ruining withstand voltage | JIS K6911 | KV/mm | 50 ↑ | 50 ↑ | 50 ↑ | 50 ↑ | 10 ↑ |
| | | | | 1KHZ | -- | 3.0~3.1 | 3.0~3.1 | 3.0~3.1 |
| Conductivity | 1MHZ | JIS K6911 | -- | 3.0~3.1 | 3.0~3.1 | 3.0~3.1 | 3.0~3.1 | -- |

REMARKS: Testing value of the above list for reference only.

◆ WIND LOAD TESTS FOR FOAMED PLATES

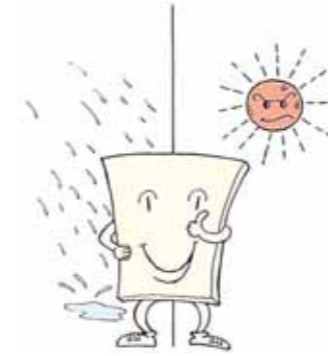
| Items | 3mm | 6mm above |
|-------------------------------------|-------|-----------|
| (kgF/m ²) Wind Load | 353.0 | 477.0 |
| (m ² /sec) Wind Velocity | 75.2 | 87.3 |
| Beaufort Scale | 17 ↑ | 17 ↑ |
| Flexural Ratio of △ P300 | 1/17 | 1/40 |

• Testing methods: Test is based on the standard of CNS 11526.



PVC INTEGRAL SKIN-FOAM PLATE

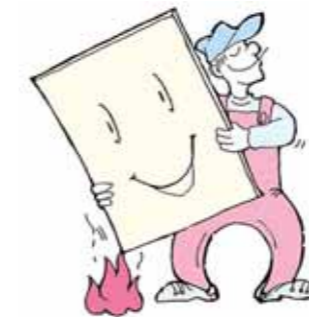
◆ ADVANTAGES



- Weather-proof, fast color
- Low absorption of water,



- Low specific gravity
- Low weight
- Firm, smooth outer skin of up to 2mm thickness
- Extremely fine-celled foam structure



- Self-fire extinguishable (UL94V-O)
- High safety

- Particularly easy to work
- Good for conventional re-processing

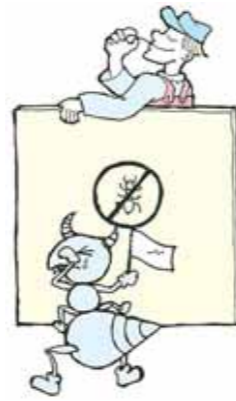


◆ ADVANTAGES



- Smooth and sturdy
- Surface with silk gloss finish
- Ideal for printing
- Good for duplicate printing, pasting, or reprocessing

- Anti-insects
- Termite resistant



- Resistant to chemical substances
- Non-corroding

- Low thermal conductivity
- Sound proof
- High insulation resistance



◆ APPLICATION

● Furniture:

- Assembly cabinet
- Desk, Chair, Furniture
- Kitchen stand next to the sink
- Door Panel of bathroom, bathroom cabinet.
- Outdoor leisure table, chair, etc.



• Office furniture



• Kitchen stand next to the sink



• Assembly cabinet

● Advertisement:

- Bulletin board
- Fair ground
- Store show window decoration
- Computer lettering



• Computer lettering



• Bulletin board



• Store show window decoration

◆ APPLICATION

● Construction decoration:

- Door panel of bathroom.
- Interior decoration
- Flower stand, flower shelf
- Cabin, Convenient Partition



• Door panel of bathroom



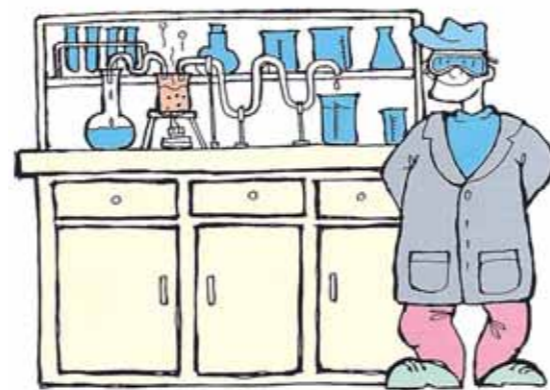
• System cabinet



• Cabin

● Others

- Laboratory desk
- Automobile floor
- Boat, icebox
- Cable/wire tank
- Products of industrial nature



• Laboratory desk



• Automobile floor



• Container

| Kind | Item | Method | Unit | Value | | | |
|-------------------------|---|-----------------------|--------------------|------------------------|------------------------|------------------------|-----|
| | | | | For furniture | For furniture | For automobile floor | |
| Mechanical | Thickness | -- | mm | 10~15 | 18~30 | 10~30 | |
| | Density | ASTM D792 | g/cm ³ | 0.55 ± 0.03 | 0.50 ± 0.03 | 0.60 ± 0.03 | |
| | Tensile strength | ASTM D638 | kg/cm ² | Vertical | 110 | 110 | 100 |
| | | | | Horizontal | 80 | 80 | 70 |
| | Flexural strength | ASTM D790 | kg/cm ² | Vertical | 240 | 240 | 260 |
| | | | | Horizontal | 180 | 180 | 200 |
| | Compressive strength | ASTMD695 | kg/cm ² | 100 | 100 | 110 | |
| | Compressive stress for a compressive strain of 30% | ASTM D695 | kg/cm ² | 180 | 180 | 190 | |
| | Modulus of elasticity | ASTM D638 | kg/cm ² | 10000 | 10000 | 9000 | |
| | Hardness | ASTM D676 | SHORE D | 65 | 65 | 68 | |
| Impact strength (+20°C) | ASTM D256 | kg.cm/cm ² | 1.5 | 1.5 | | | |
| Thermal | V-cat | ASTM D1525 | | 73 | 73 | 74 | |
| | Coefficient of linear thermal expansion (from -30°C to +50°C) | ASTM D696 | mm/m°C | 0.08 | 0.08 | 0.07 | |
| | Heating deflection temperature | ASTM D648 | °C | 55 | 55 | 56 | |
| | Thermal conductivity (from 0°C + 60°C) | DIN 52616 | w/mk | 0.03~0.05 | 0.05~0.07 | 0.05~0.07 | |
| | Rate of heat transfer | DIN 52616 | w/(m2k) | 2.0~3.0 | 1.2~1.8 | 1.2~1.8 | |
| Electrical | Volume resistivity | ASTM D257 | Ω.cm | 4.0 × 10 ¹⁵ | 2.0 × 10 ¹⁴ | 2.0 × 10 ¹⁴ | |
| | Surface resistance | ASTM D257 | Ω | 3.7 × 10 ¹⁵ | 9.3 × 10 ¹⁴ | 9.3 × 10 ¹⁴ | |
| | Dielectric strength | JI 6911 | kv/cm | 48 | 48 | 48 | |
| Others | (Rw) | DIN 52210/84 | dB | 30 | 35 | 35 | |
| | Water absorption after 7 days | ASTM D570 | % | 0.5 | 0.5 | 0.5 | |
| | | UL-94 | -- | V-0 | V-0 | V-0 | |
| | Fire behaviour | CNS-7614 | -- | Flameproof class 2 | Flameproof class 2 | Flameproof class 2 | |

◆ CHEMICAL RESISTANT

| Name of Chemical | Temperature (°C) | | |
|--------------------------------|------------------|----|----|
| | 20 | 40 | 60 |
| Concentrated Hydrochloric Acid | △ | × | × |
| Councentrated Sulfuric Acid | △ | × | × |
| Sulfuric Acid 30% | ◎ | ◎ | △ |
| Concentrated Nitric Acid | △ | × | × |
| Nitric Acid 40% | ◎ | ◎ | △ |
| Formic Acid 100% | △ | × | × |
| Lactic Acid | ◎ | △ | × |
| Caustic Soda 40% | ◎ | ◎ | ◎ |
| Ammonia Water | ◎ | ◎ | △ |
| Sodium Disulfide | △ | × | × |
| Acetone | × | × | × |
| Ethyl Alcohol | ◎ | ◎ | △ |
| Butyl Alcohol | ◎ | ◎ | △ |
| Toluene | × | × | × |
| Formalin | ◎ | ◎ | △ |
| Carbon Disulfide | × | × | × |
| Carbon Tetrachloride | △ | × | × |
| Acetic Acid 90% | △ | × | × |
| Butyl Acetate | × | × | × |
| Gasoline | ◎ | ◎ | △ |
| Glycerine | ◎ | ◎ | ◎ |
| Solution of spraying paints | × | × | × |
| Chlorine (Gas, dried) 100% | × | × | × |
| Bleaching Solution | ◎ | △ | × |
| Sea water, Salt water | ◎ | ◎ | ◎ |
| Statch (carbohydrate) Solution | ◎ | ◎ | ◎ |
| Brewing water | ◎ | ◎ | ◎ |

◎ Denotes safety applicable; △ Denotes applicable; × Denotes inapplicable

◆ SPECIFICATIONS

| Item | Ordered Products | Regular Products | |
|--------------------|--|----------------------------|----------------------|
| | For Furniture / For Automobile Floor | For Furniture | For Automobile Floor |
| Size (L × W) mm | 1220 × 2440 | 1220 × 2440 | 1220 × 2440 |
| Thickness (H) mm | 10, 12, 15, 18, 20, 24, 30 | 10, 12, 15, 18, 20, 24, 30 | 15, 18, 20, |
| Color | 017 019 021 089 110 300 410 530 810 B10 | 019 | 019 |

- ◆ Colors of finished product can be adjusted by customer requirement.
- ◆ Size of finished product can be adjusted by customer requirement.



PVC RIGID FOAM HONEYCOMB PLATE



PVC RIGID FOAM HONEYCOMB PLATE

PVC is a synthetic material with a long R&D history and is almost limitless in its adaptation to versatile applications. Unique Plastics Corp. has been dedicated for years in expanding the utility of this material and succeeded in developing the PVC Rigid Foam Honeycomb Plate - a hollow-and-foamed board material made of rigid PVC according to the Integral foaming.

By way of non-stop tests on process methods for automatic edge-sealing and inter-locking connection, the ideal structure of board-thickness and rib-spacing has been identified. PVC Rigid Foam Honeycomb Plate, with an agreeable appearance and quality texture are level with the standards of wooden furniture, and are extensively suitable for applications in architectural decoration, furniture, advertisement, vehicle-body lining, fishing rafts, boathouses, and so on.



◆ ADVANTAGES

(1) Fireproofing:

- Self-fire extinguishable
- High safety

(2) Heat resistance:

- Low thermal conductivity
- High insulation resistance

(3) Sound isolation:

- Sound proof

(4) Damp proofing:

- Weather-proof, fast color
- Low absorption of water
- No disintegration in long-term humidity, and especially suitable for the tropical climate

(5) Stability:

- High stability with little dimension variations caused by temperature and humidity
- Low specific gravity, Low weight
- Firm, smooth outer skin of up to 2mm thickness. Extremely fine-celled foam structure
- Resistant to chemical substances. Non-corroding

(6) Easiness to construct:

- Smooth and sturdy. Surface with silk gloss finish, ideal for printing
- Good for duplicate printing, pasting, or reprocessing
- Particularly easy workability, Good for conventional re-processing
- Process with automatic edge-sealing machine

(7) Good for environment:

- Anti-insects
- Termite resistant

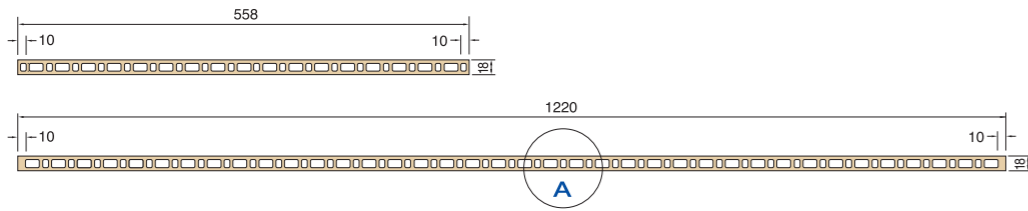


Process with automatic edge-sealing machine

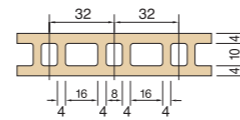


◆ SPECIFICATIONS

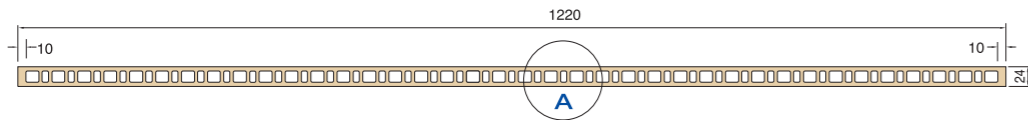
18mm



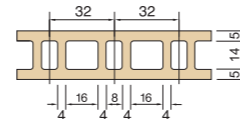
View A



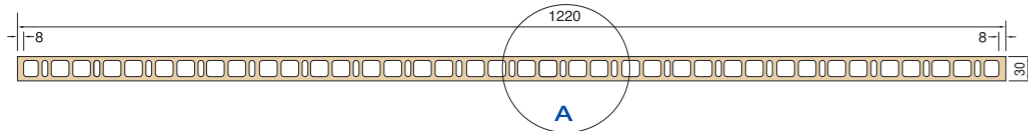
24mm



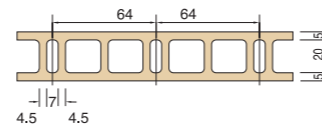
View A



30mm

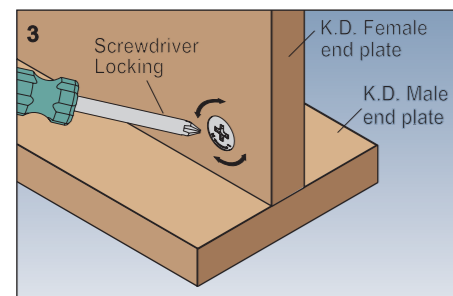
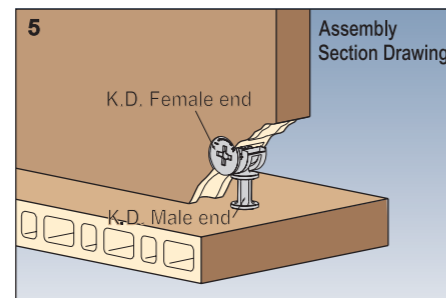
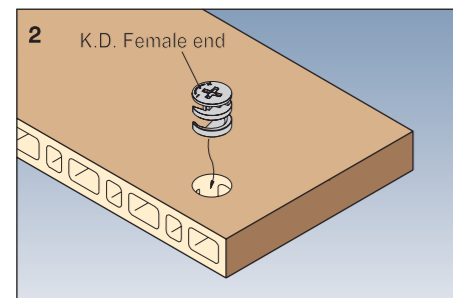
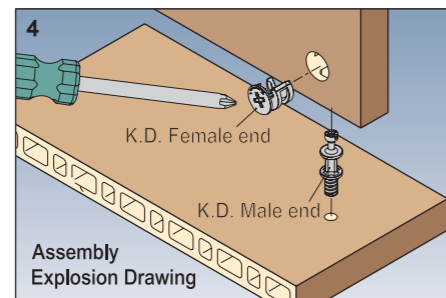
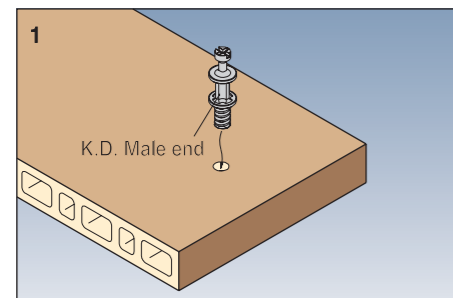


View A



◆ Colors and size of finished product can be adjusted by customer requirement.

◆ INSTALLATION GUIDE



● Furniture:

- Assembly cabinet
- Desk, Chair, Furniture
- Kitchen stand next to the sink
- Door Panel of bathroom, bathroom cabinet.
- Outdoor leisure table, chair, etc.

• Kitchen furniture



• Office furniture



• System cabinet



◆ APPLICATION

• System cabinet



• Furniture



● Construction decoration:

- Door panel of bathroom.
- Interior decoration
- Flower stand, flower shelve
- Cabin, Convenient Partition

• Door panel of bathroom



• Convenient partition



• Cabin



◆ PROPERTIES

| Kind | Item | Method | Value | Value |
|------------|---|--------------|-----------------------|--------------------------------|
| Mechanical | Hardness | ASTM D676 | SHORE D | 65 ↑ |
| | Density | ASTM D792 | g/cm ³ | 0.7 ± 0.03 |
| | Impact strength | ASTM D256 | kg.cm/cm ² | 1.5 |
| | Tensile strength | ASTM D638 | kg/cm ² | 120 ↑ |
| | Flexural strength | ASTM D790 | kg/cm ² | 240 ↑ |
| Thermal | (V-cat) | ASTM D1525 | | 75°C ↑ |
| | Coefficient of linear thermal expansion (from -30°C to +50°C) | ASTM D696 | mm/m°C | 0.08 |
| | Thermal conductivity (from 0°C + 60°C) | DIN 52616 | w/mk | 0.03~0.05 |
| | Rate of heat transfer | DIN 52616 | w(m2k) | 1.2~1.8 |
| | Heating deflection temperature | ASTM D648 | °C | 56 |
| Electrical | Surface resistance | ASTM D257 | Ω | 3.7 × 10 ¹⁵ |
| | Dielectric strength | JI 6911 | kv/cm | 48 |
| Others | Water absorption | ASTM D570 | % | 0.5 |
| | Fire behaviour | CNS 7614 | -- | Rating of flammability Grade 1 |
| | (Rw) | DIN 52210/84 | dB | 35 |

◆ CHEMICAL RESISTANT

| Name of Chemical | Temperature (°C) | | |
|--------------------------------|------------------|----|----|
| | 20 | 40 | 60 |
| Concentrated Hydrochloric Acid | △ | × | × |
| Councentrated Sulfuric Acid | △ | × | × |
| Sulfuric Acid 30% | ◎ | ◎ | △ |
| Conceutrated Nitric Acid | △ | × | × |
| Formic Acid 100% | △ | × | × |
| Formic Acid 100% | △ | × | × |
| Caustic Soda 40% | ◎ | ◎ | ◎ |
| Caustic Soda 40% | ◎ | ◎ | ◎ |
| Ammonia Water | ◎ | ◎ | △ |
| Sodium Disulfide | △ | × | × |
| Acetone | × | × | × |
| Ethyl Alcohol | ◎ | ◎ | △ |
| Butyl Alcohol | ◎ | ◎ | △ |
| Toluene | × | × | × |
| Formalin | ◎ | ◎ | △ |
| Carbon Disulfide | × | × | × |
| Carbon Tetrachloride | △ | × | × |
| Acetic Acid 90% | △ | × | × |
| Butyl Acetate | × | × | × |
| Gasoline | ◎ | ◎ | △ |
| Glycerine | ◎ | ◎ | ◎ |
| Solution of spraying paints | × | × | × |
| Chlorine (Gas, dried) 100% | × | × | × |
| Bleaching Solution | ◎ | △ | × |
| Sea water, Salt water | ◎ | ◎ | ◎ |
| Statch (carbohydrate) Solution | ◎ | ◎ | ◎ |
| Brewing water | ◎ | ◎ | ◎ |

◎ Denotes safety applicable; △ Denotes applicable; × Denotes inapplicable



A Revolutionary High Quality New Products.

A-PET RIGID SHEET



A-PET RIGID SHEET

In addition to devoting its energies to the development of new products, UNIQUE PLASTICS, with its decades-long experience in the making of plane sheets, is investing significant funds on new equipment for high quality A-PET rigid sheets in the hope of expanding its global market and upgrading its corporate competitiveness. As the quality of the new product has proven better than import sheet, this Taiwanese-made transparent sheet is leading the local extruded sheet industry well into a new era.

The UNIQUE A-PET Rigid sheet - the "high quality amorphous rigid extrusion sheet" is supported by the rich experience the company enjoys in the making of transparent and foam sheets and the new technology introduced from Germany. The product boasts of optimal mechanical, thermal as well as chemical-resistant properties. Its full burning feature creates no poisonous gases. As an environmental and safe material for use in the food industry, it is apt for a wide variety of machining works, displays or demonstrations, thermoforming as well as other purposes. The additional values of the product make it a practical plastic sheet.



▲ Environmental Awareness, Excellent Fabrication & Externely tough - UNIQUE A-PET Transparent Sheet.

◆ CHARACTERISTICS



■ EXCELLENT THERMOFORMING PROPERTIES

The precision thermoforming property of the product requires no preheating, and its shrinkage rate goes at approximately 0.5%. The product boasts of sound deep-forming property as it does not break and delivers even thickness.

■ ENVIRONMENT AWARENESS

Recyclable and non-pollutant.

■ FOOD CONTACT

The PET material meets the major food regulations, such as FDA or BGA, apt for use in food packaging and other applications.

■ HIGH CHEMICAL RESISTANCE

Optimal resistance to acids, alkali and oils.

■ LOW FLAMMABILITY

Of optimal fire resistance and as a non-comburant, the product delivers minimum smoke and no toxic gases after burning.

■ HIGH TRANSPRANT

The 87% transparency gives the product a quality appearance and apt for use in products of high transparency.

■ HIGH IMPACT

Featuring high impact and durability, the product performs perfectly in low temperature of at -40°C; making it apt for high-impact applications.

■ EASY TO PROCESS MECHANICALLY

In addition to sawing, mold cutting, drilling and laser cutting among other conversion systems, cold and hot bending, gluing, welding, polishing, printing as well as painting are also available with outstanding performances. Cold bending produces no whitening, giving the product a bright appearance.



◆ APPLICATIONS



POP, DISPLAY

Display shelves, catalogue holders, signboards, photo frame covers, and nameplates.

PROCESSING PRODUCT

Food containers, machining, medical products and transparent cases among others.

SIGNS

Indoor signs and a variety of printed materials.

◆ PRODUCTS SPECIFICATIONS

| Thickness (mm) | Width X Length (mm) | Color |
|----------------|-----------------------|-------|
| 0.5 | 915 × 1830 (3' × 6') | CLEAR |
| 0.8 | | |
| 1.0 | | |
| 1.2 | 1M × 2M | |
| 1.5 | | |
| 1.8 | | |
| 2.0 | 1220 × 2440 (4' × 8') | |

◆ PHYSICAL PROPERTIES

| Test Items | Test Methods | Units | Test Value |
|------------------------------|-------------------------|-----------------------|------------|
| Specific Gravity | ASTM D-792 | ----- | 1.350 |
| Tensile Strength (MD) | ASTM D-638 | kg/cm ² | 550 ↑ |
| Tensile Strength (CD) | ASTM D-638 | kg/cm ² | 520 ↑ |
| Elongation at Yield | ASTM D-638 at 50 mm/min | % | 100 ↑ |
| Modulus of elasticity | ASTM 638 | kg/cm ² | 13000 |
| Flexural strength | ASTM D790 | kg/cm ² | 880 |
| Flexural modulus | ASTM D790 | kg/cm ² | 20000 |
| Heat deflection temperature | ASTM D648 | °C | 65.5 |
| IZOD Impact strength (+20°C) | ASTM D256 | kg.cm/cm ² | 4.3 |
| Light transmission (1 mm) | ASTM D1003 | % | 87 |

Notes: The above data are test values for reference only not quality standards, not served as any commercial certification.

◆ CHEMICAL RESISTANCE

| Chemical | Solution resistance |
|-------------------------------|---------------------|
| Acetic Acid (40%) | ⊙ |
| Acetone | ○ |
| Aluminum Sulphate | ⊙ |
| Ammonia (10%) | ○ |
| Amyl Acetate | ○ |
| Amyl Alcohol | ⊙ |
| Benzene | △ |
| Benzoic Acid (solid) | ⊙ |
| Benzyl Acetate | △ |
| Benzyl Alcohol | △ |
| Butyl Acetate | △ |
| Butyl Alcohol | ⊙ |
| Butyl Stcarate | ⊙ |
| Carbon Tetrachloride | ⊙ |
| Citric Acid | ⊙ |
| Cetyl Alcohol | ⊙ |
| Chloroform | △ |
| Di-alkyl Phthalate | ⊙ |
| Detergents | ⊙ |
| 2-Ethyl Ethanol | ⊙ |
| Ethyl Acetate | △ |
| Formaldehyde (40%) | ⊙ |
| Formic Acid (30%) | ⊙ |
| Geraniol | ⊙ |
| Glycol | ⊙ |
| Glycerine | ⊙ |
| Hydrobromic Acid (50%) | ⊙ |
| Hydrochloide Acid (10%) | ⊙ |
| Hydrofluoric Acid (60%) | ○ |
| Hydrogen peroxide | ⊙ |
| Isopropyl Alcohol | ⊙ |
| Lubricating Grease and Oils | ⊙ |
| Methyl alcohol | ⊙ |
| Mineral oil | ○ |
| Paraffin | ⊙ |
| Petrol | ⊙ |
| Sodium Carbonate | ⊙ |
| Sodium Chloride | ⊙ |
| Sodium Hydroxide | △ |
| Sulphuric Acid (30% dilute) | ⊙ |
| Trataric Acid | ⊙ |
| Xylene | ⊙ |
| Zinc Chloride | ⊙ |

⊙ Completely non-erosive / ○ Slightly erosive / △ Unusable

◆ Testing value of the above list for reference only.



CEILING BOARD



CEILING BOARD

◆ CHARACTERISTICS ILLUSTRATIONS

(1) Sound-insulation, Heat-insulation.

UNIQUE Ceiling Board are made of rigid PVC, which is sound-insulation, heat-insulation, suitable for making ceiling.

(2) The material is self-fire extinguishing, non-flammable.

(3) Non-water-absorption.

Since UNIQUE Ceiling Board possesses the characteristics of non-water-absorption, therefore it will not absorb the water drips fallen from air-conditioning duct and will not cause water stains which will affect the appearance, it is, hence, an ideal material for ceiling installed with air conditioner.

(4) Special weather resistance formula, ceiling colors will be maintained and unchanged regardless of time factor.

(5) Light in weight, easy for installation, lowest material loss.

UNIQUE Ceiling Board are lowest material loss during the courses of production, storage, shipping, cutting, sawing, and welding. Thereby saving material. Moreover, it is easy for installation. After installation, it could be easily removed for cleaning, thus simple in maintenance.

(6) Top in Safety.

The long-time usage of UNIQUE Ceiling Board will not create any floating dust. Therefore it is harmless to people's health.



FOAMED SHEETS

◆ PRODUCTS SPECIFICATIONS

■ FLAT FOAMED SHEETS

| Items | Customized Specification | Regular Specification |
|----------------|--|-----------------------|
| Thickness | 4mm, 5mm | 4mm |
| Width × Length | 604mm × 604mm (2f × 2f) 604mm × 1206mm (2f × 4f) | 604mm × 604mm |
| Color | 0A9, 01T, 13T, 53T, 85T, 1K0, 4G0, 5D0, 8D0, 1BN, 1CQ, 1FB, 1FH, 1QK, 1BQ, 2BQ, 2CT, 3BT | 0A9, 53T, 85T |

◆ To learn more about our colors and latest innovations, please contact us.

■ COLOR

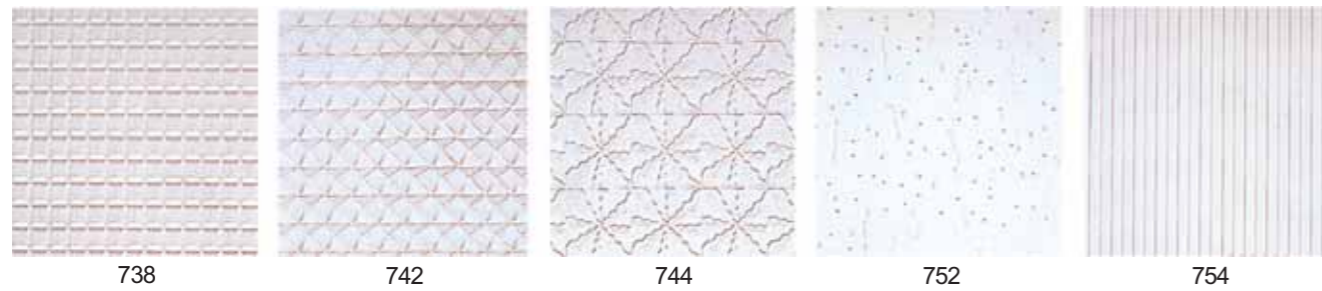


EMBOSED FOAMED SHEETS

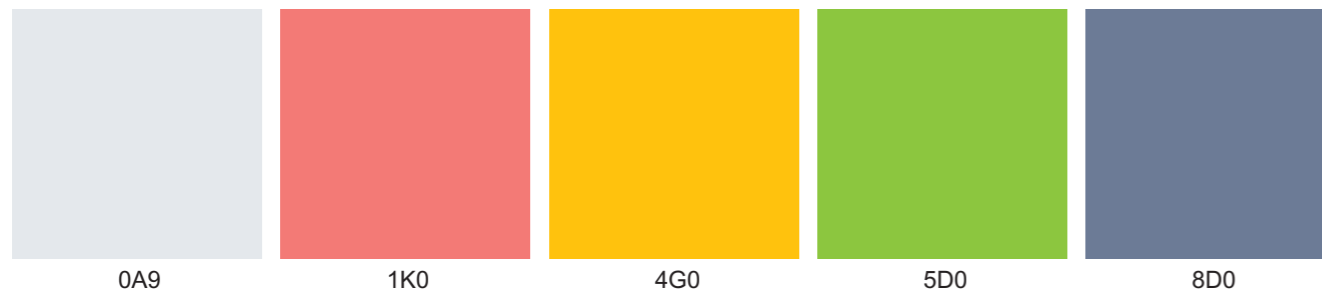
| Items | Customized Specification | Regular Specification |
|-------------------|-------------------------------|-------------------------------|
| Thickness | 4mm, 5mm | 4mm, 5mm |
| Width × Length | 604mm × 604mm, 604mm × 1206mm | 604mm × 604mm, 604mm × 1206mm |
| Embossed Patterns | 738, 742, 744, 752, 754 | 738, 754 |
| Color | 0A9, 1K0, 4G0, 5D0, 8D0, | 0A9 |

◆ To learn more about our colors and latest innovations, please contact us.

EMBOSED PATTERNS



COLOR



FOAMED SHEETS PHYSICAL PROPERTIES

| Items | Test Methods | Unit | Test Value |
|--------------------------------|------------------------|-----------------------|----------------------|
| Specific Gravity | Flat Foamed Sheets | ASTM D792 | — |
| | Embossed Foamed Sheets | | 0.68 ± 0.03 |
| Tensile Strength | ASTM D638 | kg/cm ² | 100 |
| Elongation at Break | ASTM D638 | % | 6 |
| Tensile Modulus of Elasticity | ASTM D638 | kg/cm ² | 7,600 |
| Flexural Modulus of Elasticity | ASTM D790 | kg/cm ² | 11,000 |
| Flexural Strength | ASTM D790 | kg/cm ² | 125 |
| IZOD Impact Strength | ASTM D256 | kg-cm/cm ² | 1.0 |
| Heating Deflection Temperature | ASTM D648 | °C | above 50 |
| Shrinkage Rate of Heat | ASTM D568 | % | 70°CX120minutes |
| | | | 120°CX75minutes |
| Water Absorption | ASTM D570 | % | Under1.2 |
| Flammability | CNS 7614 | — | flameproof degree 2 |
| Volume Resistivity | ASTM D257 | Ω -cm | 2.4X10 ¹⁴ |

◆ Note: The above figures obtained from laboratory are for reference only.



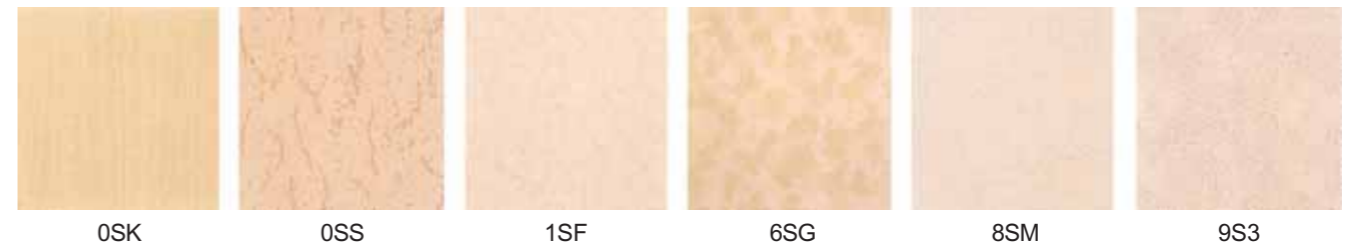
Q-BOX CEILING BOARD

◆ PRODUCTS SPECIFICATIONS

| | |
|-----------|--|
| Thickness | 8m/m , 15m/m (Hollow Inside) |
| Size | 603m/mX603m/m (2fX2f) , 603m/mX1206m/m (2fX4f) |
| Color | 017 , 0SK , 0SS , 1SF , 6SG , 8SM , 9S3 |

◆ To learn more about our colors and latest innovations, please contact us.

■ COLOR



◆ Q-BOX CEILING BOARD PHYSICAL PROPERTIES

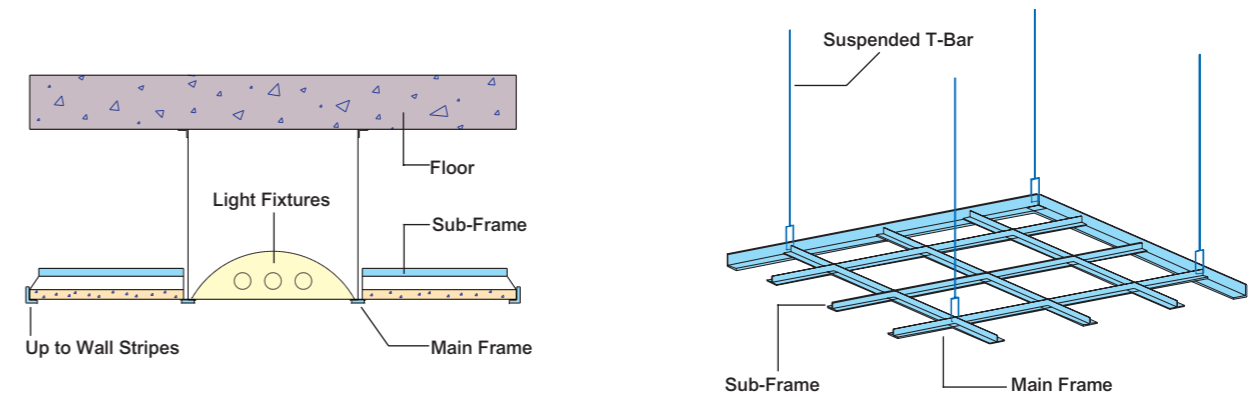
| Items | Test Methods | Unit | Test Value |
|--------------------------------|--------------|-----------------------|----------------------|
| Specific Gravity | ASTM D792 | — | 1.57 |
| Tensile Strength | ASTM D638 | kg/cm ² | 360 |
| Elongation at Break | ASTM D638 | % | 7 |
| Tensile Modulus of Elasticity | ASTM D638 | kg/mm ² | 112 |
| IZOD Impact Strength | ASTM D256 | kg-cm/cm ² | 8.5 |
| Heating deflection Temperature | ASTM D648 | °C | 75 |
| Flammability | CNS 7614 | — | Flameproof degree 1 |
| Volume Resistivity | ASTM D257 | Ω -cm | 2.8X10 ¹¹ |

◆ Note: The above figures obtained from laboratory are for reference only.

■ QUALITY STANDARD

Certification of ISO-9002 / CNS 12682 and ISO-14001 / CNS 14001.

◆ INSTALLATION ILLUSTRATIONS



- (1) Measure the height of floor, adjust the horizontal position, and calculate required quantities for main-frame and sub-frame.
- (2) Measure the location of suspended T-Bar for main-frame, and fix the suspended T-Bar under the floor.
- (3) Join the suspended T-Bar with main-frame and floor.
- (4) Assemble sub-frame with main-frame.
- (5) Please arrange in order of arrow's direction for beauty when cover with ceiling board.

