



PVC FLOOR COVERINGS
TECHNICAL COATED TEXTILES
PVC SHEETS AND FILMS
KNITTED FABRIC







THE MARVEL GROUP

The Marvel Group is a diversified conglomerate, with business interests in the field of Plastics, Healthcare, Textiles, Chemicals and Retailing. At the center of this wide portfolio is the plastics business Marvel Vinyls Limited.

We aren't new to the field of plastics, the business started off as the promoters being the largest distributors of PVC Sheets and Films in the 1960's under the name of Ganesh Dass and Co. Under the sound leadership of Late Shri. Ganesh Dass Chawla, the group followed the natural course of expansion and Marvel Vinyls Limited was born in 1985.

Marvel started manufacturing PVC Sheets and Films in its newly acquired manufacturing facility in Sahibabad (U.P) and expanded its infrastructure geographically in Madhya Pradesh as well as vertically by diversifying further into Vinyl Floorings, PVC Synthetic Leather, Technical Coated Textiles and Knitted Industrial Fabrics over the years.

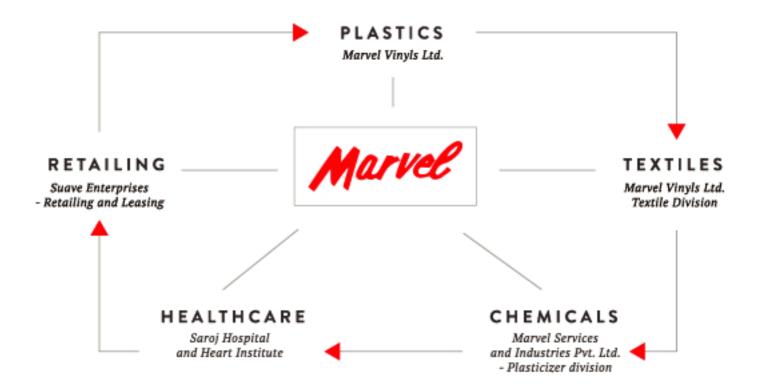
In addition to the plastics business, the group also operates two tertiary care hospitals in North Delhi-SAROJ Super Speciality Hospital (www.sarojhospital.com). The healthcare business offers an immense growth opportunity to the group and the hospitalsare never behind any new technologies. Saroj happens to be one of handful hospitals in India that offers advanced services like Liver and Organ Transplant. Continuous developments and rapid expansion of the healthcare business is underway as we aim to bring our total bed strength from current 450 to 1500 by 2018. Other business interests of the group are in leasing, in addition to plasticizer production and industrial textile knitting.

MARVEL VINYLS LIMITED

Established in the year 1985, Marvel Vinyls Limited, an ISO 9001 certified company, operates 5 manufacturing units at three geographical locations in India.

MISSION STATEMENT

"To deliver cost competitive products with unmatched quality, while providing an unparalleled business service and experience".



Today Marvel Vinyls is easily the most diversified PVC converting companies in India with the widest product range in the industry.

Our more than 3 decades into Manufacturing has been very eventful, with Marvel achieving above average year on year growth and emerging as one of the largest PVC converters in India, with the current capacity standing tall at 3900 MT/Month. The group is actively seeking capacity expansion and aims to bring capacity up to 5000 MT by FY 2016.

Our products once fabricated are visible in almost all walks of your daily life as they range from your shower curtain, your defense personnel's armored vest, the specialized flooring in your hospital, the shock proof flooring at the power station that provides you electricity, the awning at your favorite restaurant, to the car seat that you sit on! The list is endless.

Our expertise in such diverse fields is supported by our technical collaborations with companies in Canada and Korea along with our unparalleled R&D teams working out of our 4 quality laboratories. Our wide distribution network ensures that our products reach every corner of the country in addition to any market in the world.

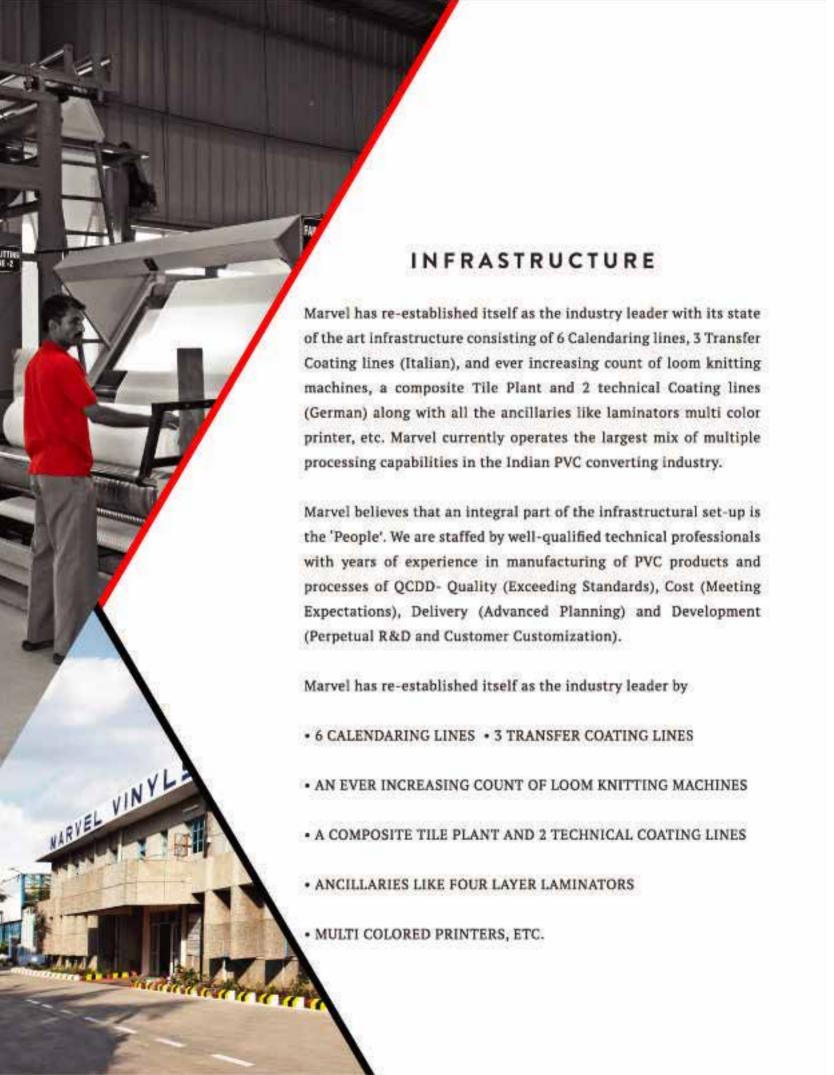
With a professional management and hierarchy, you will find that all your concerns and needs will be catered to at every step of your correspondence. Our dedicated sales team looks forward to serve you.

VISION STATEMENT

To be the recognized leader in the field of PVC products and building materials, by developing innovative products and processes that exceed market expectations, while achieving operating excellence in every segment of Marvel.

VALUE STATEMENT

Marvel Vinyls Limited offers
the largest range of PVC and building
material products under one roof, while
being highly customized for the end
application and following the core customer
service promise of delivering on QCDD
(Quality, Cost, Development and Delivery).





SYNTHETIC LEATHER

For the automotive, upholstery, footwear industries, etc.

PVC FLOOR COVERINGS

For applications ranging from home to industrial uses.

PVC SHEETS & FILMS

For household applications like table covers, shower curtains, etc.to specialized anti-fungal sheets for pool liners to superior quality films for automotive applications like sun visors. Unlimited applications based on Marvel's customized sheeting offerings.

TECHNICAL COATED

For Coated Fabrics including single and double side coated tarpaulins, awnings and other fabrics with specialized characteristics.

KNITTED FABRIC

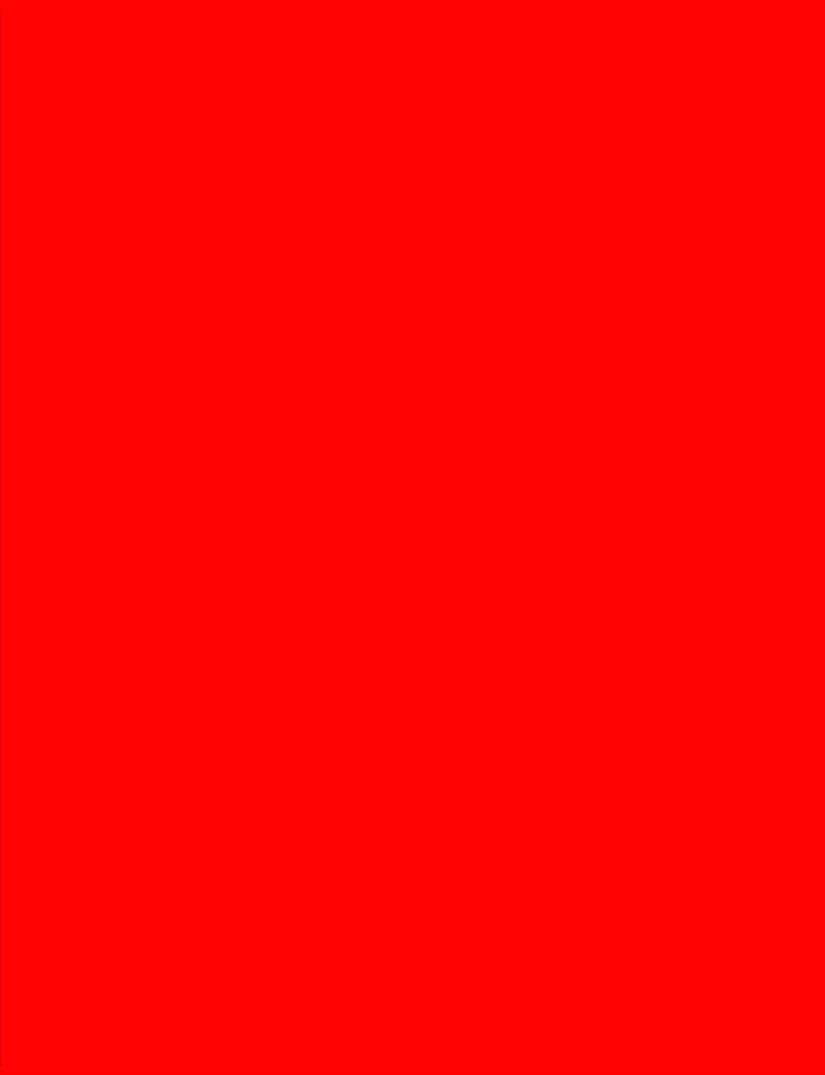
For Residential - Low cost furnishings.

For Industry - Use as substrate for polymer coatings.

For Automotive - Used as seat covers, roof liners and door trims.

SYNTHETIC LEATHER

For the automotive, upholstery, footwear industries, etc.





AUTOBLISS PVC LEATHER

For car seat covers

Marvel has been supplying to the automotive sector for more than 2 decades! In addition to being the oldest in the industry, we have no incident of line stoppage or quality issues in the entire time of supply.

Quality and Consistency is at the core of everything we do here and it is no wonder that most OEM's in India have us as the preferred supplier with maximum share of business. We understand the automotive industry and are at the forefront of innovations, product development, delivery and cost reduction measures. Our plants follow all environmental and technical standards set by the American and European Auto Industry and are approved for supply to various countries across the world.

Our 50% manufacturing output is exported to all continents and the balance is supplied to OEM majors and the replacement segment. Marvel is the most reputed supplier of PVC Leather via its chain of distributors in the country and abroad.

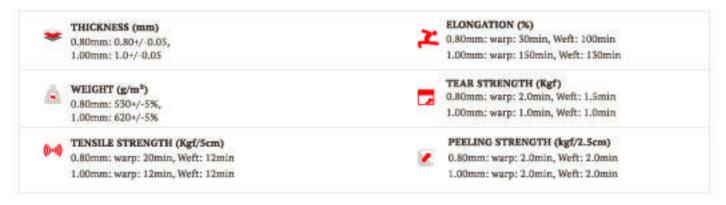
The Autobliss range of Leatherette not only matches the look and feel of leather, but also excels in various weather resistant tests. We design our PVC Leather to be highly durable and customize it with a range of coatings. Autobliss is offered with various coatings that make the product scratch resistant, water repellant, anti-bacterial, fire resistant, stain resistant, leather like, UV resistant and temperature stabilized. We even have customized formulations to make fragranced PVC Leather, with any fragrance of your choice!

APPLICATIONS

Our Autobliss range covers all automotive requirements.

- Automotive: PVC Leather Cloth with Customized specifications for car seats and two wheelers
- Transport: Fire Resistant PVC Leather Cloth for Railways and commercial vehicles

Autobliss pvc leather for car seat covers 0.80mm





ELEGANCE PVC LEATHER

For home and office furnishings

At marvel our main focus in addition to innovations in designs is Quality and Consistency. We understand the furnishing industry and are at the forefront of product development, delivery and cost reduction measures. Our plants follow all environmental and the products meet technical standards of the highest level of JASO M-327-83 specifications.

Our 70% manufacturing output is exported to all continents and the balance is supplied to exclusive distributors and direct furnishing manufacturers. Most reputed office furniture manufacturers in India use our material for some or most of their products.

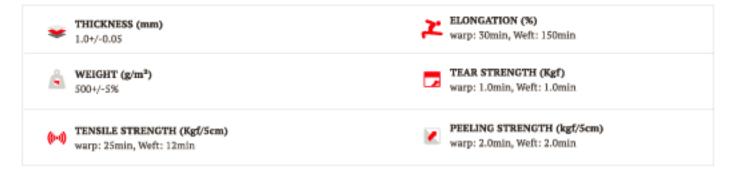
The Elegance range of Leatherette not only matches the look and feel of leather but is also designed to be highly durable and customized with a range of coatings. Most of the elegance range comes coated with a layer of PU to ensure that the product feels soft and supple and at the same time matches the leather look. Elegance PVC Leather is offered with various coatings that make the product scratch resistant, water repellant, anti-bacterial, fire resistant, stain resistant, UV resistant and temperature stabilized. We even have customized formulations to make fragranced PVC Leather, with any fragrance of your choice!

APPLICATIONS

Our Elegance range covers all Furnishing requirements with a touch of class.

- · Residential: PVC Leather Cloth for Home Furnishings
- · Commercial: PVC Leather Cloth for Office Furnishings
- · Healthcare: Anti-Bacterial PVC Leather Cloth for Healthcare
- · Wet Areas: Water Repellant PVC Leather for Outdoor Furnishings

Elegance pvc leather for home and office furnishings 1.00mm





WALKWELL PVC LEATHER

For Footwear Industry

Marvel's focus is on developing footwear products that meet extremely high specifications. We understand the footwear industry and believe that our materials need to be tough enough to be worn without fear of cracking. We are the only company in India that offers a guarantee of up to 1 million bally flex cycles rating in shoe uppers. In addition, we are the only ones with quality testing facilities at temperatures as low as -20 degree Celsius, making us the sole supplier to footwear companies targeting high altitude markets.

Most of our supplies in the footwear industry are OEM's that value quality and consistency. In addition, we also export the Walkwell range of PVC Leather to Europe where low temperatures need extremely high quality materials. The Walkwell range of Leatherette not only matches the look and feel of leather but is also customized with a range of coatings. Most of the Walkwell range comes coated with a layer of PU to ensure that the product feels like leather and is scratch resistant.

The entire PVC Leather Cloth range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free. Walkwell is available in finishes from ultra matt to high gloss and in various leather-like textures and prints.

APPLICATIONS

Walkwell PVC Leather Cloth range covers the entire footwear industry in the form of Shoe Uppers, Shoe Insoles and Shoe Linings.

- · Footwear: Complete range for all applications and utilities
- Healthcare: Anti-Bacterial Walkwell PVC Leather for Doctor and Nurse Shoes
- · Defense: Extremely Durable PVC Leather for high altitude and trekking

Walkwell pvc leather for footwear industry 0.80mm lining





APPEASE PVC LEATHER

For Stationary

Appease PVC and PU Leather cloth is used in both supported and unsupported forms for stationary and similar small articles. Marvel's edge here is the ability to supply even back to back laminated products with different colors or textures on each side, making it easier for fabricators to make file covers and folders.

Our main focus in addition to innovations in designs is Quality and Consistency. Our plants follow all environmental and the products meet technical standards of the highest level of JASO M-327-83 specifications.

Most of our Stationary PVC Leather is used in India and a portion is exported to highly developed markets like North America and France. Marvel has an advantage over others in supplies to developed countries as entire operations meet the environmental standards set by most organized stationary manufacturers.

The Appease range of Leatherette not only matches the look and feel of leather but is also designed to be highly durable and customized with a range of coatings. Most of the Appease range comes coated with a layer of PU to ensure that the product feels soft and supple and at the same time matches the leather look. Appease PVC Leather is offered with various coatings that make the product scratch resistant, water repellant, anti-bacterial and fire resistant. Extra emphasis is put on making the leather cloth seam resistant to be able to take intricate stitching without any issues.

APPLICATIONS

- · Industry: PVC Leather cloth for stationary
- · Residential: PVC Leather Cloth for small articles

Appease pvc leather for stationary 1.0mm unsupproted





VOGUE PVC LEATHER

For the Fashion Industry

We are developing an ever increasing range of imitation leather for the clothing and accessories market. Whether it's an imitation leather jacket or a hand bag, you will see our products in various countries and with the top brands in the industry.

Our main focus in addition to innovations in designs is Quality and Consistency. Our plants follow all environmental and the products meet technical standards of the highest level of JASO M-327-83 specifications.

Most of our Vouge PVC Leather is used in India and a portion is exported to highly developed markets like North America, United Kingdom and Italy. Marvel has an advantage over others in supplies to developed countries as entire operations meet the environmental standards set by most luxury apparel brand owners.

The Vouge range of Leatherette not only matches the look and feel of leather but is also designed to be highly durable and customized with a range of coatings. Most of the range comes coated with a layer of PU to ensure that the product feels soft and supple and at the same time matches the leather look. Vouge PVC Leather is also customized with features such as water repellant, anti-bacterial and fire resistant. Extra emphasis is put on making the leather cloth seam resistant to be able to take intricate stitching without any issues.

APPLICATIONS

Fashion Industry: PVC Leather cloth for Clothing, Jackets and Accessories

Vogue pvc leather for fashion industry 0.80mm





TRAVEL TOUGH PVC LEATHER

for Luggage Industry

Marvel offers a separate line of synthetic leather for the luggage industry, known as Travel Tough. Applications vary from bags to wallets and luggage.

Our focus for the travel tough line is for high quality and extremely durable materials that meet specific applications. Our biggest consumer being the Government, Marvel's Travel Tough PVC Leather is widely used in for the manufacturing of kits and carrying bags for on field soldiers.

We ensure a very high seam resistance so carrying loads can be up to 100 kgs! Our travel tough range is also certified and recommended for use in Indian Armed Forces.

Our main focus in addition to innovations in designs is Quality and Consistency. Our plants follow all environmental and the products meet technical standards of the highest level of JASO M-327-83 specifications.

The Travel Tough range of Leatherette not only matches the look and feel of leather but is also designed to be extremely durable and customized with a range of coatings. Most of the range comes coated with a layer of PU to ensure that the product feels soft and supple and at the same time matches the leather look. Travel Tough PVC Leather is also customized with features such as water repellant, anti-bacterial and fire resistant. Extra emphasis is put on making the leather cloth seam resistant to be able to take intricate stitching without any issues.

APPLICATIONS

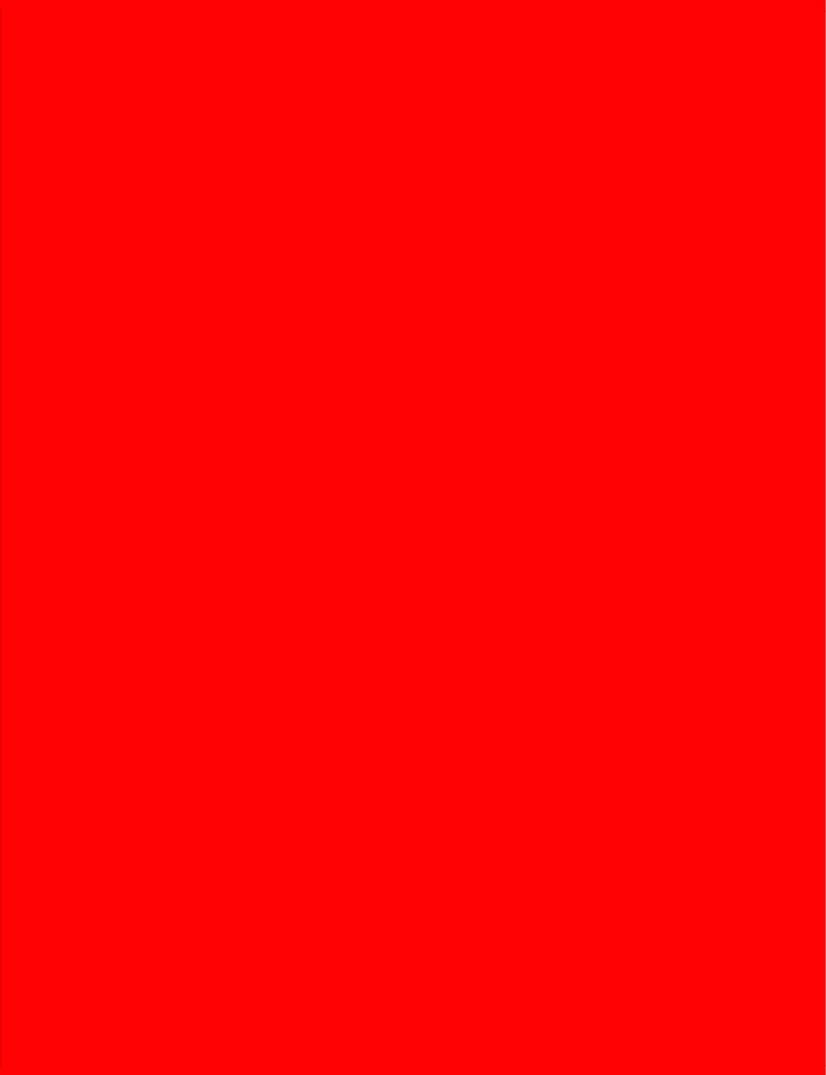
Luggage Industry: PVC Leather cloth for bags, wallets, luggage and other applications

Travel tough pvc leather for luggage industry 2.5mm unsupported



PVC FLOOR COVERINGS

For applications ranging from home to industrial uses.





ART FLOOR

Marvel's Designer Printed Flooring

Marvel's Art designer flooring is an economical printed flooring range offered in a spectrum of colors and designs comprising of more than 200 prints and shades. Popular for its low cost viability, Marvel Art Floor conforms to an ultimate standard of perfection for beautification of floors in an artistic way. The Art Floor is laminated in three layers (Transparent, Print and Base), making it highly durable.

The top transparent layer is specially designed as an abrasion resistant layer for protection of the underlying print layer and to prevent the flooring from losing aesthetics because of erosion by friction. It also provides a shine and gloss to the flooring.

APPLICATIONS

Marvel's Art Floor is extremely popular for low cost applications. It is the perfect choice for economically glamorizing homes, shops, offices, showrooms, restaurants, malls etc.

Specification/ Drawing: IS: 2076 0.40mm, 0.45 mm, 0.50 mm & 0.65mm





DELIGHT FLOOR

Marvel's Luxury Wooden And Printed Flooring

Delight Floor is a premium printed heavy duty flooring range suitable for applications that require good traction, durability along with stylish elegance. Delight Flooring is a homogeneous multi layered vinyl product, which is abrasive and wear resistant. With a three layered formulation, the top layer gives the flooring strength and wear resistance, while the middle layer contains the print design. The bottom layer is the base layer which gives the material its thickness and strength. With its unique patterns and designs, it is offered in a choice of wooden and other luxury finishes.

APPLICATIONS

Delight floor offers the look and feel of Marble or Wooden floor at fraction of the cost! Delight Floor is suitable for providing a luxurious low maintenance floor for residential purposes, showrooms, offices, malls, hospitals and so on.

Specification/ Drawing: IS: 2076, Dimension: - 1.2 mm





ENDURA FLOOR

Marvel's Heavy Duty Flexible Flooring

Marvel's Endura floor is a commercial/industrial flooring for heavy-duty applications that require good traction and durability. Endura floor is a homogeneous three layered vinyl product, highly suited to the end customer's applications. It can be designed and modified to fit special customer requirements, such as anti-bacterial, food grade, anti-fungal, etc. Anti Skid in nature, it is offered in special colors, sizes, thickness, width, and special physical and biological applications.

APPLICATIONS

Endura Floor is best suited for extra heavy-duty traffic commercial and industrial applications such as warehouses, porta cabins, factories, schools, exhibition centers, etc.

| * | THICKNESS (MM) EN 428 2.00 MM OTHER THICKNESS AVAILABLE FROM 1.0 MM - 3.0 MM | K | SLIP RESISTANCE DIN 51130 |
|----------------|--|----------|--|
|) - | SHEET EN 426 2.00 MM X 2 MTR. X 15 MTR. = 30 SQ. MTR. OR AS PER BUYER'S SPECIFICATION TILE SIZE 305 MM X 305 MM, 610 MM X 610 MM | ~ | FLEXIBILITY AT LOW TEMPERATURE IS:3462:86 SHALL NOT BREAK, CRACK OR SHOW ANY OTHE SIGN OF FAILURE |
| 23 | DIMENSIONAL STABILITY EN 434 <0.40% (CK QUALITY) | • | RESIDUAL INDENTATION EN 453 <0.10 MM |
| • | CASTOR CHAIR EN 425 SUITABLE | 6 | WEIGHT EN 430 3.6 KG/ SQ. MTR. FOR 2.0 MM |
| | ABRASION RESISTANCE (CC) ISO:9352 0.35 CC (MAX.) | * | FUNGI & BACTERIA RESISTANCE DOES NOT FAVOR GROWTH |
| _ | PLY ADHESION (KN/M) ISO:3464:86 1,05 (MIN.) | * | LIGHT FASTNESS ISO 105-B02] >BLUE WOOL STANDARD 6 |
| _ | THICKNESS OF WEAR LAYER (MM) EN 429 0.25 MM | - - | WIDTH (MTRS.) 18:3464:86 2:0+/-0.10 |



DYNA FLOOR

Marvel's Conductive Flooring

Dyna Floor is a conductive flooring that completely eliminates static charge. It is the next level in protection. And is most commonly used in explosive manufacturing units, in addition to other applications. Marvel's Dyna Floor prevents any accidents due to static charges generated while handling explosives. The material is also used on tabletops where high precision and sensitive electronic equipment is positioned, in addition to highly sensitive units where watches are manufactured.

APPLICATIONS

Marvel's Dyna Floor is best suited in Explosive manufacturing units, Ordnance factories, Ordnance depots, Explosive handling areas and so on.

Specification / Drawing: EN: 1081, IS: 3462/1986 Dimension: 2mm

| 1 | PLY ADHESION (KN/m) Adhesion between plies in any test plece shall not be less than 1.05 kn/m. | X. | RESIDUAL INDENTATION (mm) Shall not exceed 0.10 mm |
|---|---|----|--|
| * | THICKNESS (nam) MAX I MIN I MEAN The mean thickness shall not differ by more than 0.13 mm from that specified. Variation in Thickness The variation between any two measurements shall not exceed 0.20 mm Width Shall not be less then that specified and not 6 mm more then that specified | 50 | DIMENSIONAL STABILITY Machine direction (%) Change in any linear dimension Transverse direction (%) shall not exceed 0.40 percent. Visual Inspection After the test the specimen shall show no signs of curling |
| • | VISUAL OBSERVATION Should be free from pin holes, blisters, porosity & visual defects. | 1 | FLEXIBILITY (O°C for 60 Minutes) Shall not break crack or show any other signs of fullure |
| * | ELECTROSTATIC RESISTANCE (ohms) AS PER EN : 1081 Less then 1X10 ^s | * | COLOUR FASTNESS TO DAY LIGHT The Colour Fastness correspond to at least standard No. 4 |
| 8 | ELASTIC PRODUCT (MI/m²) The mean product of tensile strength and elongation shall be not less than 2MI/m3 | 8 | HEAT AGEING AND EXUDATION (at 70°C for 15 days) No exudation of plasticizer shall be apparent nor shall there be any change in appearance. The mandrel test shall not produce surface cracking |
| ~ | CURLING (mm) Shall not exceed 0.75 mm. Machine direction & Transverse direction (Strange in any linear dimensions shall not exceed 0.4 percent | 6) | |



GUARD FLOOR

Marvel's Supported Floorings

Marvel offers a range of supported floorings

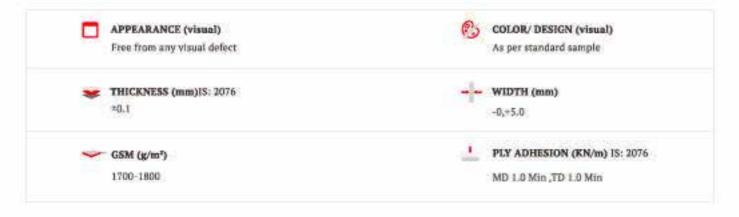
- Jute Backed Jute Felt Backed PP Backed
- · Non Woven Backed

In extreme cold climatic conditions, Nonwoven, Felt polyester, Jute, etc. backed floorings are the only versatile and practical solution. With an extra glossy surface Guard Floor is also used as car matts mainly because of their strength and textile friction with car floors.

This Flooring material is extensively used in parts of India, Russia, Ukraine, Central Asian Republics, African Subcontinent, and the Middle East; in addition to applications requiring specialized backing specifications. Marvel offers a wide range of colors, designs and embossing to choose from in the Guard Floor.

APPLICATIONS

Skid-Safe Flooring is highly suitable for travel applications such as luxury coaches, rail coaches, lifts, industrial units, travel ramps, automobile mats, construction sites and so on.





MARVEL INSULATION MAT

Marvel Insulation Mat is a specialized flooring having very high insulation resistance (upto 3300 KV). Marvel insulation mat is life saving! Protecting people working around high voltage panels of AC & DC Electrical Insulations, from electrical shocks. Marvel has developed a specialized formulation to be able to offer its insulations Mats as per the IS 15652:2006.Marvel Insulation Mat takes electrical safety to the next level as it is fire retardant and highly durable; a great advancement since stone age rubber mats!

APPLICATIONS

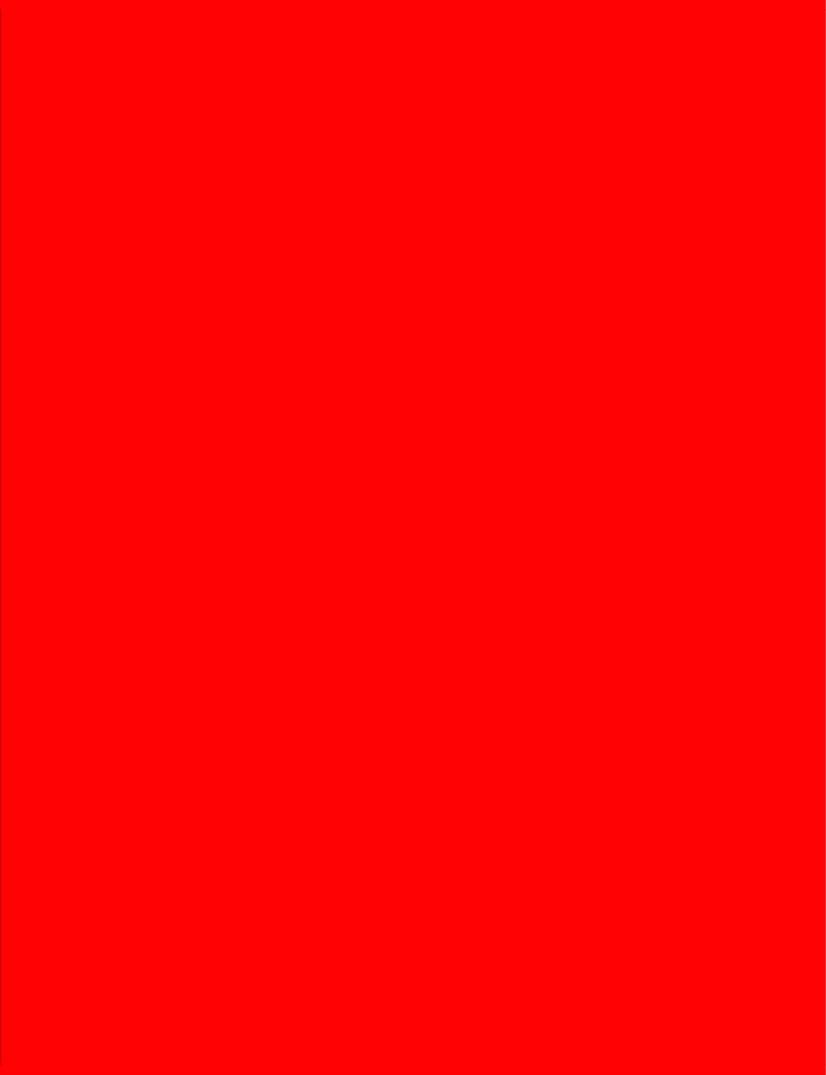
It is best suited for control panels, transformer rooms, sub-stations operating HT & LT switch gears, generator rooms, battery rooms, power plants, etc.

Specification / Drawing: EN:1081, IS: 3462/1986 Dimension: 2mm

| 0 | SHAPE 6.1 2 mm: Should be specific shape or Roll 3mm: Should be specific shape or Roll | | LEAKAGE CURRENT 8.2.2 (μA) 2 mm; 10 mA Max 3mm; 10 mA Max. |
|-----|--|-----|---|
| 23 | DIMENSIONS 6.2 (mm) Length 2 mm: Should be 1000 mm + 20 mm Should be 1000 mm + 20 0r in other width agreement with purchaser 3mm: Should be 1000 mm + 20 mm Should be 1000 mm + 20 or in other width agreement with purchaser | ŭ | AGEING PROPERTIES (70+10C)FOR 168 H Tensile strength 2 mm: 75 % OF corresponding value of same lot sample without conditioning 3mm: 75 % OF corresponding value of same lot sample without conditioning |
| * | THICKNESS 6.3 (mm) 2 mm: 2.00 mm + 10 % 3mm: 3.00 mm + 10 % | + | AC PROOF VOLTAGE 8.2.4 (kv) 2 mm: 10 Kv 3mm: 36 Kv |
| 0-0 | TENSILE STRENGTH 8.1 (N/mm²) 2 mm: 15 (-10 to 15 °C) 12 (-40 to 27 °C) 3mm: 15 (-10 to 15 °C) 12 (-40 to 27 °C) | 0 | THERMAL FLAME RETARDENCE 8.2.1(Second) 2 mm: 5 s after removal of blue flame 3mm: 5 s after removal of blue flame |
| r | ELONGATION 8.1 (%) 2 mm: 15 (-10 to 15 °C) 12 (-40 to 27 °C) 3mm: 15 (-10 to 15 °C) 12 (-40 to 27 °C) | * | ACID /ALKALIS AND OIL RESISTANCE 8.5 (N/mm²) (Acid Resistance) Tensile strength Elongation 3mm: 80 % OF corresponding value of same lot sample without conditioning |
| 0 | INSULATION RESISTANCE 8.2.1 (M Ω) 2 mm: 100000M Ω(5000 V megger)1000000M Ω(500 V megger) 3mm: 100000M Ω(5000 V megger) 1000000M Ω(500 V megger) | (4) | AC DI ELECTRIC STRENGTH 8.2.3 (kv) 2 mm; 30 Kv 3mm; 65 Kv |

PVC SHEETS & FILMS

For household applications like table covers, shower curtains, etc.to specialized anti-fungal sheets for pool liners to superior quality films for automotive applications like sun visors. Unlimited applications based on Marvel's customized sheeting offerings.





CLEAR PVC FLEXIBLE SHEET

Our plants follow all environmental and technical standards set by the American and European Industries and are approved for supply to various countries across the world. A majority of our Transparent Flexible PVC Sheets are distributed through our channel sales partners in India. We also export the product based on specific requirements. Marvel is one of the most reputed suppliers of Transparent PVC Sheets and Films in the country.

Clear PVC Films serve a variety of uses and we understand the need for introducing new print and texture designs to move forward with changing trends. Marvel introduces new print designs on a monthly basis and focuses heavily on print accuracy and high color reproduction in addition to providing gel free clear transparency.

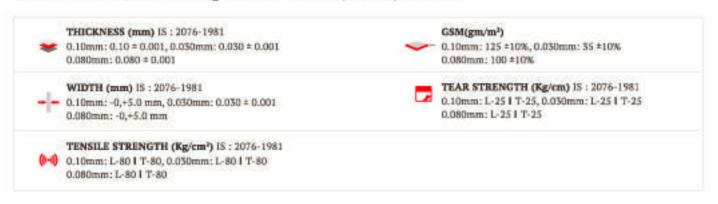
We design our PVC sheets with 100% virgin raw materials to be highly durable and customize it with different prints, texture or laminations to suit the end application. In addition to Fire Retardency, we can add features such as anti-bacterial, stain resistance, UV resistant and anti-fungal by means of specialized proprietary formulations. The entire PVC Clear Sheet range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius.

APPLICATIONS

Our PVC Clear Sheets serve a variety of applications. Some of them are:

- · Residential: Items like table covers, equipment covers, shower curtains, etc.
- · Industrial: for use in fabrication of wind curtains and other equipment covers
- Other applications requiring very high up to 99.3% transparency

Color / Emb. - Clear / Non Embassing. Thickness - 0.10mm, 0.30mm, 0.080 mm





OPAQUE PVC FLEXIBLE SHEET

Quality and Consistency is at the core of everything we do here and since our origins were in the trading of PVC sheets, we are intricately aware of the end quality requirements in the product. We are at the forefront of innovations, product development, delivery and cost reduction measures. Our plants follow all environmental and technical standards set by the American and European Industries and are approved for supply to various countries across the world.

Our Opaque Flexible PVC Sheets are distributed through our channel sales partners and direct sales in India. We also export the product based on specific requirements. Marvel also boasts of the largest range in Opaque Post Processed PVC Sheets in India.

Opaque PVC Films serve a variety of uses and we understand the need for introducing new print and texture designs to move forward with changing trends. Marvel introduces new print designs on a monthly basis and focuses heavily on print accuracy and high color reproduction in addition to having the ability to lock in the print design with a highly transparent and thin layer of clear PVC.

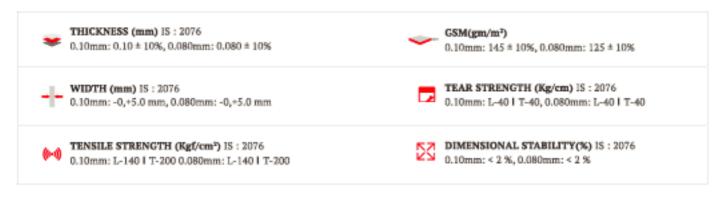
We design our PVC sheets with 100% virgin raw materials to be highly durable and customize them with different prints, texture or laminations to suit the end application. In addition to Fire Retardency, we can add features such as anti-bacterial, stain resistance, UV resistant and anti-fungal by means of specialized proprietary formulations. The entire PVC Sheeting range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius...

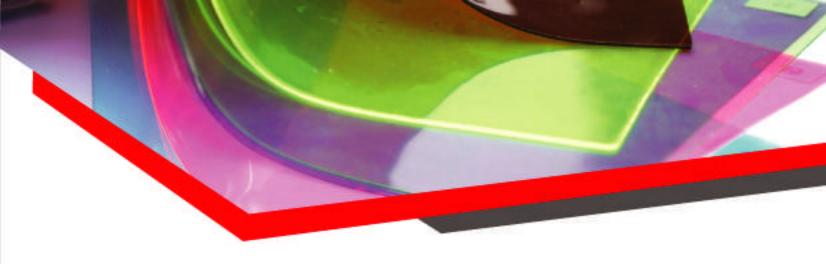
APPLICATIONS

Our PVC Opaque Sheets serve a variety of applications. Some of them are:

- Residential: Items like table covers, equipment covers, shower curtains, etc.
- Industrial: for use in fabrication of various items and other equipment covers
- · Stationary: For use in file covers
- · Other applications requiring 0 transparency

Colour / Emb. - Opaque / Non Embossing





TRANSLUCENT PVC FLEXIBLE SHEET

Quality and Consistency is at the core of everything we do here and since our origins were in the trading of PVC sheets, we are intricately aware of the end quality requirements in the product. We are at the forefront of innovations, product development, delivery and cost reduction measures. Our plants follow all environmental and technical standards set by the American and European Industries and are approved for supply to various countries across the world.

Our Translucent Flexible PVC Sheets are distributed through our channel sales partners and are exported based on specific requirements. Marvel also boasts of the largest range in Translucent Post Processed PVC Sheets in India.

Translucent PVC Films serve a variety of uses and we understand the need for introducing new print and texture designs to move forward with changing trends. Marvel introduces new print designs on a monthly basis and focuses heavily on print accuracy and high color reproduction in addition to having the ability to lock in the print design with a highly transparent and thin layer of clear PVC.

We design our PVC sheets with 100% virgin raw materials to be highly durable and customize them with different prints, texture or laminations to suit the end application. In addition to Fire Retardency, we can add features such as anti-bacterial, stain resistance, UV resistant and anti-fungal by means of specialized proprietary formulations. The entire PVC Sheeting range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius.

APPLICATIONS

Our PVC Translucent Sheets serve a variety of applications. Some of them are

- Residential: Items like shower curtains, mattress covers, etc.
- Industrial: For use in fabrication of various items and other equipment covers
- · Healthcare: Anti-Bacterial PVC Films for Mattress Covers
- · Other applications requiring light emitting opacity

Color / Emb. - Clear / Non Embossing.





PVC FLEXIBLE SHEET

For automotive industry

Marvel has been supplying to the automotive sector for more than 2 decades! In addition to being the oldest in the industry, we have no incident of line stoppage or quality issues in the entire time of supply. Marvel currently is the largest supplier of PVC Sheets and Films to the Indian Automotive industry with a market share of more than 50%. Quality and Consistency is at the core of everything we do here and it is no wonder that most OEM's in India have us as the preferred supplier with us being single approved supplier for as many as 8 clients. We understand the automotive industry and are at the forefront of innovations, product development, delivery and cost reduction measures. Our plants follow all environmental and technical standards set by the American and European Auto Industry and are approved for supply to various countries across the world.

We design our PVC Sheets to be highly durable with 100% virgin raw materials and customize them with a range of coatings suited for auto applications. PVC Sheets are offered with various proprietary formulations that make the product scratch resistant, water repellant, anti-bacterial, fire resistant, stain resistant, leather like, UV resistant and temperature stabilized.

The entire PVC Sheeting range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius.

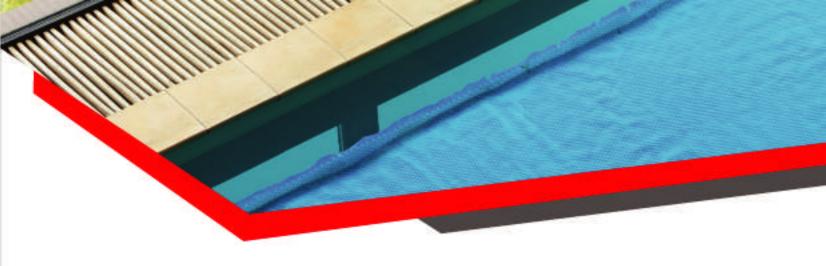
APPLICATIONS

Our PVC Sheeting range covers all automotive requirements.

- Automotive: PVC Sheets for door trims, roof lining, sun visors, silencer components, tool kits
- Transport: PVC Sheets for door trims, roof lining, sun visors, silencer components, tool kits

Color / Emb. - Clear / Non Embossing Thickness - 0.060 mm





PVC FLEXIBLE SHEET

For Water Proofing and Tank Lining

Marvel offers single and multi-layered PVC Sheets for use in waterproofing applications.

Quality and Consistency is at the core of everything we do here. Our plants follow all environmental and technical standards set by the American and European Industries and are approved for supply to various countries across the world.

We design our PVC Sheets to be highly durable with 100% virgin raw materials and offer high levels of water proofing due to their multiple layer construction. Moreover, our PVC Sheets are 100% recyclable, which makes the process environmentally friendly and offer cost savings to various industries.

The entire PVC Sheeting range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius. We have the largest multiple processing capabilities for PVC processing in India, which means that we can make the same product in a variety of formulations and from different processes. Talk about blown films, calendared or extruded sheets and expanded PVC Sheets, we have the ability to supply all the products from under a single roof. PVC Sheets for waterproofing are offered in thicknesses ranging from 0.15mm to 1.00mm with features and textures as per customer requirements. We recommend for products to be 2 or three layered as this reduced any chance of porosity.

APPLICATIONS

Our water proofing materials are used as following.

- Industry: Tank liners, dump yards, waste collection areas, roof waterproofing, floor waterproofing.
- Residential: Swimming pool liners, roof water proofing, floor water proofing
- Government: River bed liners, pool liners, dump yards, toxic waste collectors, roof and floor waterproofing





PVC FLEXIBLE SHEET

For Packaging

Marvel utilizes its own PVC Sheet production for all its packaging requirements. In addition we supply Clear sheets to various industries that use them for their packaging requirements.

Quality and Consistency is at the core of everything we do here. Our plants follow all environmental and technical standards set by the American and European Industries and are approved for supply to various countries across the world.

We design our PVC Sheets to be highly durable with 100% virgin raw materials and offer major benefits when compared to paper and other packaging materials. Moreover, our PVC Sheets are 100% recyclable, which makes the process environmentally friendly and offer cost savings to various industries.

The entire PVC Sheeting range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius. We have the largest multiple processing capabilities for PVC processing in India, which means that we can make the same product in a variety of formulations and from different processes. Talk about blown films, calendared or extruded sheets and expanded PVC Sheets, we have the ability to supply all the products from under a single roof. PVC Sheets for packaging are offered in thicknesses ranging from 0.02mm to 0.20mm with features and textures as per customer requirements. We can even add custom logo prints to customers for their branding requirements.

APPLICATIONS

Our packaging materials are used as following.

- · Industry: Packaging of finished goods, and shrink wrapping
- · Residential: PVC Sheets for household goods

Color / Emb. - Clear / Non Embossing. Thickness - 0.10mm, 0.30mm, 0.080 mm





CUSTOMIZED PVC FLEXIBLE SHEETS

Marvel is one of the oldest and most reputed manufacturers of PVC Sheets and Films in India. With origins dating back to 1985, we have been delivering quality materials for a wide variety of applications. Even today we are surprised to find new uses for our products and are in the forefront when it comes to new product development for specialized applications.

We offer our products through direct industrial sales and channel distributors for consumer applications. We are known to have the most designs and textures for PVC Sheets in the industry with us adding new products every month. Internationally, Marvel sells its PVC Sheets to distributors and Industries directly. We design custom spec products to meet a variety of added specs and features.

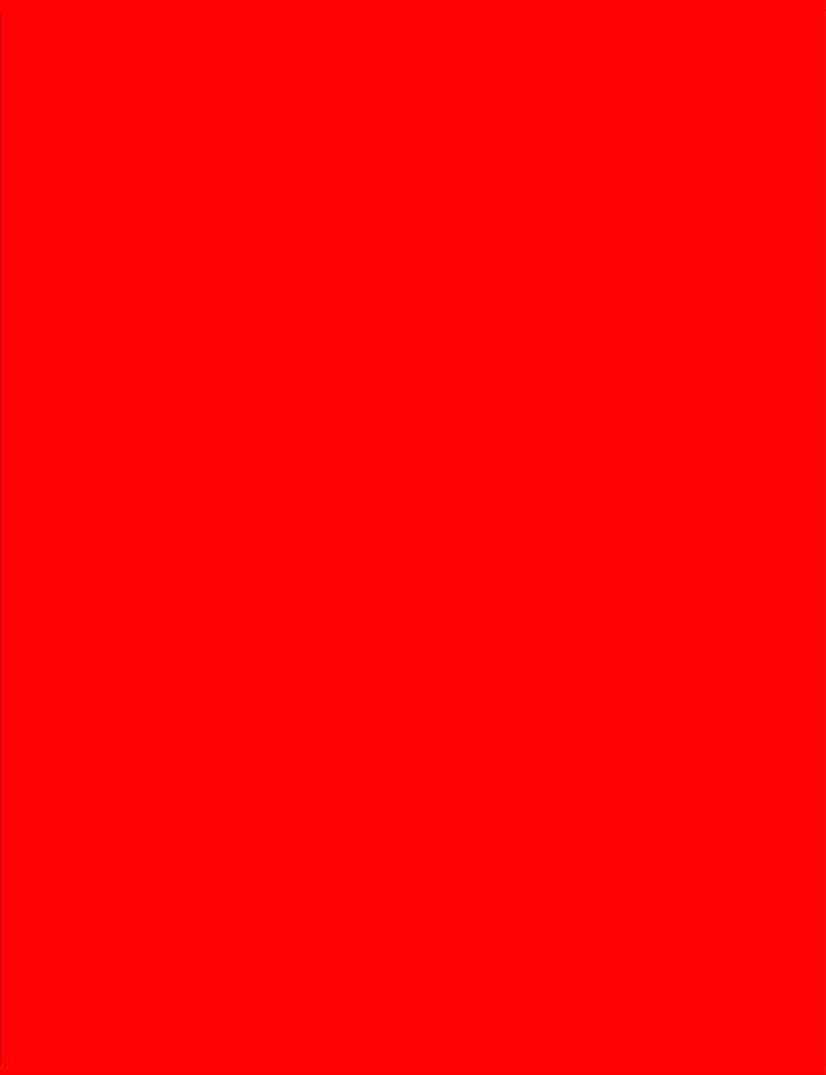
We currently operate 3 Calender Lines, a perforation line, 4 Laminators, and 5 multi-color printers in our PVC Sheet manufacturing facilities. We also have 2 R&D centers to custom design products and for addition of new designs and textures. We boast of the only set-up in the country with the ability to manufacture PVC Sheets as thin as 20 microns and have over 500 print designs with a capacity to manufacture 1500 MT of PVC Sheets each month.

Contact us to know how we can help in your Custom PVC requirements.



TECHNICAL COATED TEXTILES

For Coated Fabrics including single and double side coated tarpaulins, awnings and other fabrics with specialized characteristics.





SINGLE SIDE COATED TEXTILES

Marvel's Anti-Stat complies with the requirements of the widely used material specifications like ISO, RDSO specn. No.C-8515 Rev.2, IS-3462/1986. We have mastered our Anti-Static formulation and technology by way of making continuous investments towards the development of this product.

Anti-Static and Conductive flooring from Marvel is not only anti-bacterial, but also fungus resistant and static charge defusing. This ensures that the product is a choice for areas with critical equipments, electrical appliances and electronic assembly lines aren't damaged by static charge that usually builds on floors due to traffic.

We design the product to be highly suited to the end customer's applications. The Anti-Static PVC Flooring range itself offers a wide variety of products that offer special features such as anti-bacterial, Fire Resistant, anti-fungal, etc. as per usage requirements. In addition, our entire Anti-Stat PVC Flooring range is VOC Complaint.

It is critical to customize the flooring based on the specific need; hence Marvel offers two standards of Static resistance in 2.00mm and 3.00mm.

APPLICATIONS

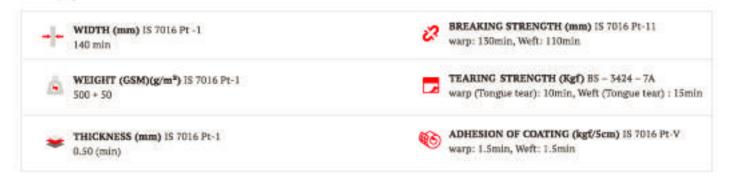
The most common uses of Single Side Coated Textiles are:

Automotive: Auto Hoods

· Residential: Awnings and Tents

· Commercial and Retail: Awnings and Tents

· Transport: Truck Covers





DOUBLE SIDE COATED TEXTILES

With the primary focus on Quality and Consistency, we continue to have the most diverse quality laboratory setup in the country. We understand that coated textiles are put through difficult tests throughout their life and use 100% virgin raw materials in their construction for enhanced durability.

Our proprietary coatings serve multiple applications and make us able to supply products which are: fire retardant, scratch proof, water repellant, anti-bacterial, anti-fungal and UV stabilized. We use of a combination of PU, PVC and acrylic coatings in addition to the relevant textile to achieve a variety of product needs. We also offer a variety of print options if the product is to be used as awnings or other furnishing applications.

The entire Coated Textile range is VOC compliant and meets the highest industry benchmark of REACH Compliance. They are completely lead and heavy metal free and are odorless even at temperatures exceeding 90 degree Celsius. Our double side coated textiles are designed to be highly durable and are put through a variety of tests before dispatch. Some of our products carry 10 year guarantees and we offer full installation support in India. Our range of post processing equipment like lacquering lines and multi-color printers also ensure increased applications of our products. Our polymer scientists continue to innovate while trying to achieve the best balance of weather resistance and durability.

Double side coated fabrics are offered in a variety of textile options and coating weights starting from 200 GSM up to 1500 GSM on each side.

APPLICATIONS

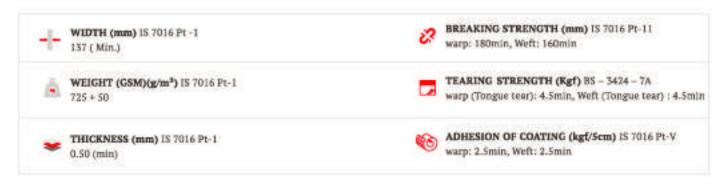
· Automotive: High Durability Auto Hoods

Residential: Awnings and Tents
 Industry: Highly durable tents

· Defense: High Altitude foldable tents

· Commercial and Retail: Awnings and Tents

· Transport: Truck Covers





GEO-MEMBRANES

Marvel's range of single and double side coated textiles are also customized to serve as geo-membranes.

We offer a variety of coatings to make the products serve a long life span and at the same time remain anti-fungal and water repellant. In addition all our geo-membranes are anti-bacterial and fire retardant.

The entire Coated Textile range is VOC compliant and meets the highest industry benchmark of REACH Compliance.

They are completely lead and heavy metal free and are odoriess even at temperatures exceeding 90 degree Celsius. We have a range of post processing equipment which helps us deliver customized designs for end applications and our proprietary coatings serve very specific applications.

Contact us about how we can help in your geo-memberane requirements



CUSTOMIZED COATED FABRICS

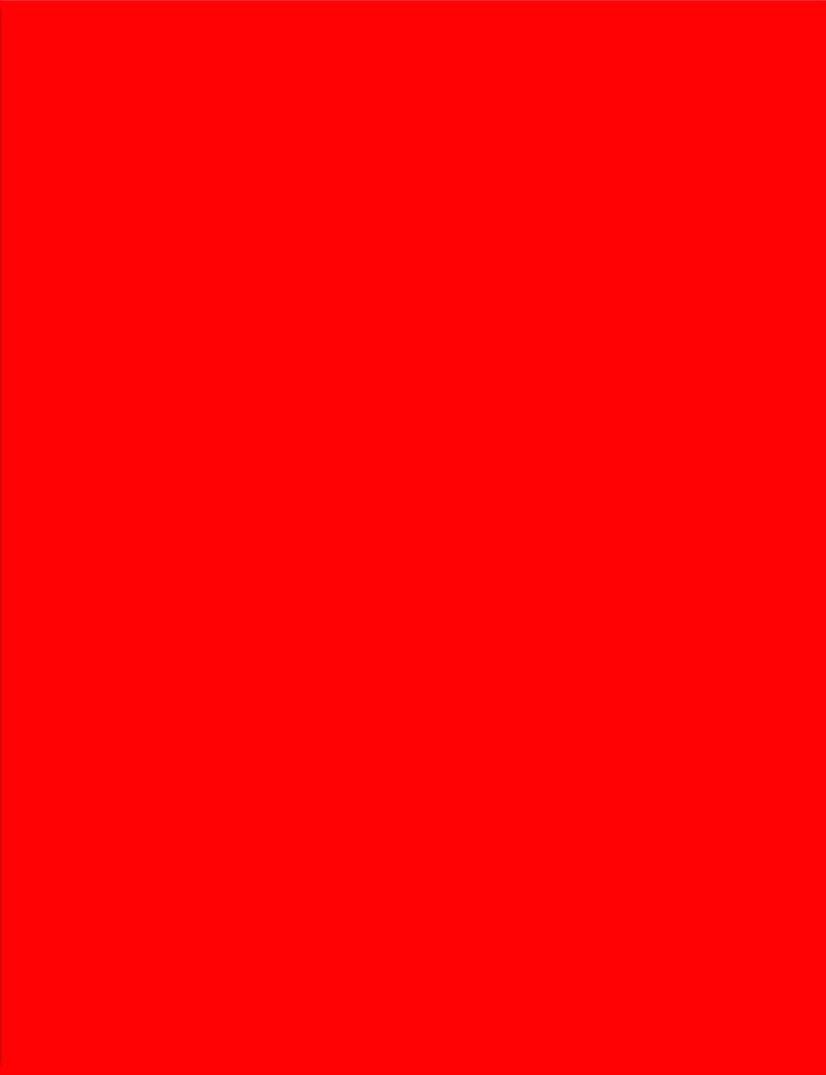
Marvel has pioneered the manufacture of high performance technical coated textiles in India. With the largest multi-processing capabilities in the country, Marvel can produce technical textiles via a wide variety of processes. We can easily claim to have the largest customizable options in our material, ranging from coating weights, thicknesses, prints, textures and specifications.

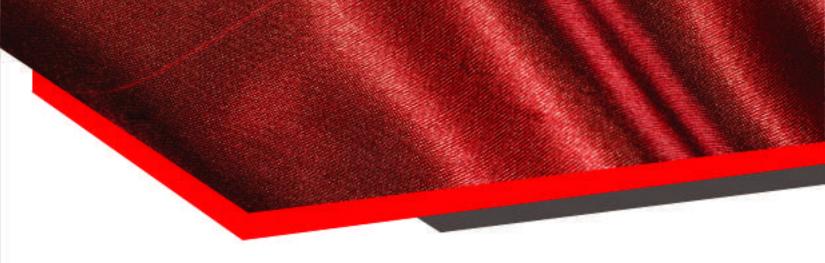
Our adoption of world-class technology helps us produce high quality fabrics catering to applications ranging from agriculture, commercial to defense. Known for their toughness and fungus resistance qualities, Marvel manufactures a variety of technical textiles primarily backed or coated with polymers in different thicknesses and weights. We offer end products and services for specialty coatings to users to add life and features to textiles. And offer a vast variety of coating solutions to add specialty characteristics to any form of textile. Cotton, polyester, nylon, blended fabrics; Marvel can make any fabricwater/stain resistant, heat resistant, fire proof, water resistant, UV resistant, Anti-Bacterial, Insulating, Conductive, to name just a few. Marvel's specialized team for specialty coatings can meet specific market requirements by suggesting coatings to be performed to meet the customer requirements. Marvel performs its textile coatings on 2 direct coating lines with the added facility of dipping, laminating and printing all on a single machine! This not only reduces cost, but also adds to a capacity of converting 800 MT of fabrics monthly. Our expertise in polymers including PU, PVC and acrylics is also enhanced by a dedicated R&D center for technical coated textiles.

Contact us to know how we can add more of everything to your fabrics.

TECHNICAL COATED TEXTILES

For Coated Fabrics including single and double side coated tarpaulins, awnings and other fabrics with specialized characteristics.





SINGLE CIRCULAR KNITTED FABRIC

Marvel has a complete range of single jersey circular knitted fabrics.

We use various yarns of polyester, cotton, nylon, and their blends to create circular knit structures ranging from 20 GSM all the way up to 800 GSM.

We operate two facilities for circular knitting, one each in Sahibabad and Gwalior, with the main aim to feed our internal requirement of 130 MT monthly.

These fabrics are designed in a variety of warp and weft configurations to deliver on specific features of elongation, tear, tensile and bursting strength. We can also manufacture single jersey water repellant fabrics via our dipping process.

The entire production process is in-house with circular knitting machines, slitting machines, dying facility and heat setting stenter.

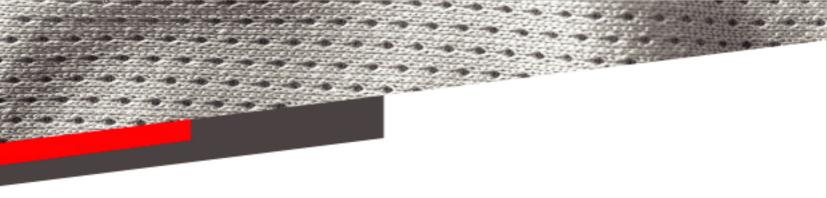
We supply Single Jersey Knitted Fabrics to other industries; contact us with your requirements for a specific quote.

APPLICATIONS

- · Industry: Use as substrate for polymer coatings.
- · Automotive: Used as seat covers, roof liners and door trims.
- · Residential: Low cost furnishings

Single circular knitted fabric 8.5 mtr quality





DOUBLE CIRCULAR KNITTED FABRIC

Marvel has a complete range of double jersey circular knitted fabrics.

We use various yarns of polyester, cotton, nylon, and their blends to create circular knit structures ranging from 40 GSM all the way up to 1200 GSM.

We operate two facilities for circular knitting, one each in Sahibabad and Gwalior, with the main aim to feed our internal requirement of 50 MT monthly.

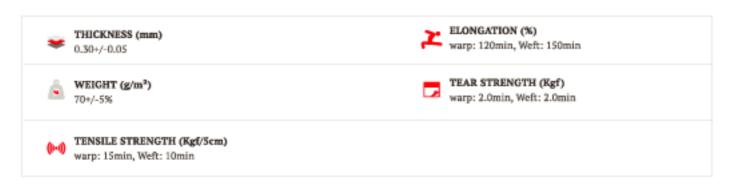
These fabrics are designed in a variety of warp and weft configurations to deliver on specific features of elongation, tear, tensile and bursting strength. We can also manufacture double jersey water repellant fabrics via our dipping process.

The entire production process is in-house with circular knitting machines, slitting machines, dying facility and heat setting stenter.

We supply Double Jersey Knitted Fabrics to other industries; contact us with your requirements for a specific quote.

APPLICATIONS

- · Industry: Use as substrate for polymer coatings.
- · Automotive: Used as seat covers, roof liners and door trims.
- · Residential: Low cost furnishings





CROSS KNIT FABRICS

Cross Knit fabrics are specifically manufactured mainly in polyester yarn to add high levels of tear strength to end coated products.

Marvel has also prepared a Poly Viscous blend which can be manufactured in a cross knit construction for applications that require good adhesion strength.

Marvel recommends the use of adhesion bonders on its cross knit fabrics for a superior bond.

APPLICATIONS

Industry: Use as substrate for polymer coatings and for flocking



LOOP KNIT FABRICS

Cross Knit fabrics are specifically manufactured mainly in polyester yarn to add high levels of tear strength to end coated products, while maintaining a better elongation than cross knit products.

Marvel has also prepared a Poly Viscous blend which can be manufactured in a loop knit construction for applications that require good adhesion strength as well.

Marvel recommends the use of adhesion bonders on its loop knit fabrics for a superior bond.

APPLICATIONS

Industry: Use as substrate for polymer coatings and for flocking





MICRO KNIT FABRICS

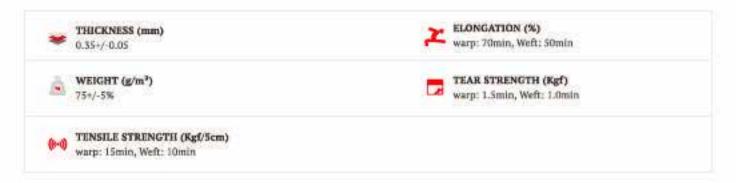
Micro knit fabrics are used for applications that require an extremely fine feel along with superior tear strength. This fabric is only recommended for applications that require extreme strength, but are not recommended for applications like furnishings where elongation and stretch is required.

Marvel recommends the use of adhesion bonders on its micro knit fabrics for a superior bond.

APPLICATIONS

Industry: Use as substrate for polymer coatings and for flocking

Micro knit fabric as per 8 mtr micro



CUSTOMIZED LOOP STRUCTURE FABRICS

Marvel has immense experience working with a variety of yarns for fabrics and maintains inventory for supplies good for at least 2 months.

We have the ability to manufacture samples for custom loop structures of various compositions, and hence have a quick turnaround for sampling. In addition, we are currently doubling our manufacturing capacity from 180 MT to 350 MT in the next two years, with ample space for quick deliveries.

Having a dedicated R&D center, we are sure that we can provide a textile solution to your requirement. Do contact us with your desired application for us to custom build a product for you.



CERTIFICATIONS

- Marvel offers PVC floor coverings and synthetic leather that are approvedby the Indian Railways (RDSO).
 - Marvel's products are ASTRU approved.
 - Marvel Vinyls Limited is an ISO 9001 Certified Company.
 - · The product range has been marked by ISI.
 - · Marvel is a Government recognized Export House.



Certificate of Registration

This certificate has been awarded to

Marvel Vinyls Limited

Site 1- G-73 Connaught Circus, New Delhi, 110001, India, Site-2- 83 to 86, Malanpur Industrial Area, Malanpur, Distt. Bhind, Madhya Pradesh, Site-3-64/3, Industrial Area, Site IV, Sahibabad, Uttar Pradesh, India

in recognition of the organization's Quality Management System which complies with

ISO 9001:2008

The scope of activities covered by this certificate is defined below

Manufacture and Marketing of PVC Film and Sheeting, PVC Floor Covering and Tiles, PVC Leather Cloth (PVC Coated Fabric) and Knitted Fabrics

Certificate Number:

Date of Issue: (Original)

Date of Issue:

13645/B/0001/UK/En

25 February 2005

25 February 2014

Issue No:

Expiry Date:

....

24 February 2017

On behalf of the Schemes Manager











SEGWING RELATIONSHIPS THEOUGH DATE

Rating Certificate

This is to certify that

Dun & Bradstreet Information Services India Private Limited ("D&B")

has evaluated

MARVEL VINYLS LIMITED

(D-U-N-S* Number 65-024-6150) which has been assigned a Dun & Bradstreet Rating of 4A3.

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Authorized Signatory for Dun & Bradstreet

Date: 28th Aug 2015

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भारतीय मानक ब्यूरो **BUREAU OF INDIAN STANDARDS**

Bhopal Branch Office

Address

रावदसाविक एवं कार्यालय दशहरा नेदान के सामने ई-५, अपेस मालोगी, विट्टा **भीपल 462 Ot6, मारत** Commercial-cum-office C E-5 Arera Colony. Bhopul-462016

द्रशंतम

0755-2423452, 3423449

Phones:

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ई-मेस e belbaijbis.org in

mail

वेब web: http://www.bic.org.in.

ATTACHMENT TO LICENCE NO. CM/L - 2519758

| सीएम/एस संख्या CML/NO | लाइसेंसधारी का पता सहित नाम NAME OF THE LICENSEE WITH THE ADDRESS | उत्पाद का नाम NAME OF THE PRODUCT | भा मा संख्या IS NO. |
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| 2519758 | M/s Marvel Vinyls Limited, 84, Industrial Area, Malanpur,Bhind – 477 117 Madhya Pradesh | Insulating Mats for Electrical purposes, Class A Thickness 2.0mm, & Class C Thickness 3.0mm Category III, not suitable for extreme low temperature | IS 15652: 2006 |

ENDORSEMENT NO. 04 DATED

The following additional varieties have been included in Columns(2) of the first schedule and column (1)of the the Second Schedule of the Licence alongwith the Standard Mark in Column (1) of First Schedule with effect from

"Insulating Mats for Electrical purposes, Class B , Thickness 2.5mm, Category III, not suitable for extreme low temperature"

Other terms and conditions of the licence remain the same.

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E: enquiry@marvelvinyls.com