



TOPAZ

FRP

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ABOUT US

We are proud to refer to more than 35 years of experience founded in 1986, in research & development, production & steady distribution of high quality & specialty Mosaic, Plain & Chequered Tiles, Interlocking Pavers Matt, Glossy & Shot Blast Pavers, Concrete Blocks in various sizes., Precast Concrete Cable Covers with ISI mark, Fly Ash Bricks in various sizes, Curb stones and many more products. Topaz is in approved list in MES (Maharashtra and Other States) Pune Cantonment Board and PMC from more than 20 years.

NOW, TOPAZ has entered a new market know as **TOPAZ FRP** and now TOPAZ FRP is the leading Manufacturer of FRP Manhole and Water Tank Cover and much more. Within a year, TOPAZ FRP has attained complete customer satisfaction & has emerged as one of the prominent name in the **FRP manhole cover , FRP moulded grating ,FRP heavy duty cover, FRP window shades, FRP Planters, FRP Doors** and many more. The Spirit and Philosophy of this young and fast paced company is fueled by creating a niche for innovation and creativity in the world of FRP Composites. Employees are encouraged to take risk, challenge convenient wisdom and create innovative FRP products. **TOPAZ** has it's own fleet of transportation which helps us to give timely delivery of materials.

WHAT IS FRP?

FIBRE-REINFORCED POLYMER (FRP)

Is a composite material made of a polymer matrix reinforced with fibers. The fibers are usually glass fibers, the polymer is usually an epoxy, vinylester or polyester thermosetting plastic, and phenol formaldehyde resins are still in use. FRPs are commonly used in the aerospace, automotive, marine, construction industries and ballistic armor.

COMPRESSION MOLDING - When the raw material containing reinforced fibers are compressed & molded at certain pressure & temperature the final outcome would be called a FRP molded product, which qualifies it as a fiber-reinforced polymer. More typically the polymer preform used in compression molding does contain reinforcing fibers.

ADVANTAGES AND LIMITATIONS - FRP allows the alignment of the glass fibers to suit specific design programs. Specifying the orientation of reinforcing fibers can increase the strength and resistance to deformation of the polymer. Glass reinforced polymers are the strongest and most resistive to deforming forces when the polymers fibers are being exerted with a parallel force.

ADVANTAGES & DISADVANTAGES

OF FRP

HIGH LOAD RATING AND STRENGTH

Similar hardness in property as cast iron, but major advantages on stretch recovery and bend resistance. Less noise and lower vibration transmissions. Designed to meet and exceed A 15/B125 /C250/ 400/E 600/F900 loading rating, according to En 124: 1994

AGAINST THEFT AND SAFETY OPTIONS

Comparing with cast iron manhole cover, composite cover has zero the value and therefore not attractive to thieves, which reduce the potential accident and further maintenance cost caused by theft. Surface anti-slip thread guarantees safe road condition even in extreme weather. Locks are available as an option molded into the cover to improve security rate. Non-electricity conduction and non-heat conduction, UV resistance.

EASE IN INSTALLATION

Compared with cast iron manhole covers, composited covers are 45% lighter. Lighter weight allows ease of handling, more loading per vehicle and more convenient transportation. This allows for safe working conditions, where a SINGLE worker is enough for a complete installation without risk of injury. Easy handling and movement reduce maintenance cost.

DURABLE SERVICE LIFE

More than 25 years theoretical service life at usual road condition. Anti corrosion, dust and waterproof, well sealed prevent poisonous gases from leaking out. Higher and lower temperature tolerance.

FREE DESIGN

Composite material itself allows for innovative design features. Client logo and their own design is available as an option. Much more clear resolution ratio design than cast iron or of other material.

CARBON FOOTPRINT SAVING AND ENVIRONMENTAL CARE

Lower embedded energy carbon emission during manufacturing process than cast iron covers. New material, manufacturing technology and lean production help reduce carbon footprint.

COMPARISON

TOPAZ FRP MANHOLE COVERS	CI / DI MANHOLE COVER
Free from fear of theft as the material is non reprocessible and has no resale value.	Heavily prone to theft as material is reprocessible & has high resale value.
High service life (min. 30 years) as it does not corrode and has high impact resistance.	Low service life as it corrodes with the service conditions & has low impact resistance.
Easy to handle due to light weight.	Difficult to handle due to heavy weight.
No risk on injury due to light weight.	High risk on injury due to light weight.
Does not rust due to chemicals / sewage / rain water.	Gets rusted due to chemicals / sewage / rain water.
No additional cost to be incurred for the corrosion resistant plate which is required below the cover to protect the cover from corrosion.	Additional cost to be incurred for the corrosion resistant plate which is required below the cover to protect the cover from corrosion.
High on aesthetics due to varied colors available.	Low on aesthetics.
The covers are self pigmented and do not require expensive epoxy painting for protection throughout its life.	The covers regularly need expensive epoxy painting to be conducted for protection.
The pigments are inbuilt in the material and UV stabilizing. Hence there is no peeling / fading of the colours due to sunlight.	The proxy painting peels over a period as it is a secondary process.
Locking arrangement if required is available to avoid displacement of covers due to back pressure in low lying areas.	
Good resistance to extreme temperature (100 C to +80 C.)	

SQUARE MANHOLE COVER



CLEAR OPENING	
SIZE (MM)	SIZE INCH(“)
300MM X 300MM	12" X 12"
450MM X 450MM	18" X 18"
600MM X 600MM	24" X 24"
750MM X 750MM	30" X 30"
900MM X 900MM	36" X 36"
1000MM X 1000MM	40" X 40"
1200MM X 1200MM	48" X 48"
1500MM X 1500MM	60" X 60"

GROUP	TRAFFIC DESCRIPTION	CLASS	PROOF LOAD KN
1	Area which can only be used by pedestrians.	A15 ELD 2.5T	15KN 25 KN
2	Suitable for use in light vehicle movement.	LD 5T	50 KN
3	Suitable for use in service lane, parking, etc.	B125 MD 12.5	125 KN 100 KN
4	Gully tops for curb side of roads.	C250 HD 25T	250 KN 200 KN
5	Carriageways of roads, hard shoulder & parking areas.	D400 EHD 40T	400 KN 350 KN
6	Areas for imposing high wheel loads e.g. docks & aircraft hangar.	E600	600 KN

All sizes available from 2.5 tons to 40 tons

We also custom make different sizes as per your requirements.

COMPLIES WITH EN124.2015

RECTANGLE MANHOLE COVER



CLEAR OPENING	
SIZE (MM)	SIZE INCH(“)
450MM X 600MM	18” X 24”
450MM X 900MM	18” X 36”
600MM X 900MM	24” X 36”
600MM X 1200MM	24” X 48”
900MM X 1200MM	48” X 36”

All sizes available from 2.5 tons to 40 tons
We also custom make different sizes as per your requirements.

COMPLIES WITH EN124.2015

CIRCLE MANHOLE COVER



CLEAR OPENING	
SIZE (MM)	SIZE INCH(“)
530MM ROUND	21” ROUND
560MM ROUND	22” ROUND
600MM ROUND	24” ROUND
900MM ROUND	36” ROUND

All sizes available from 2.5 tons to 40 tons
We also custom make different sizes as per your requirements.
COMPLIES WITH EN124.2015

TANK COVER

OVERHEAD WATER TANK COVER



COMPOSITE "OVER HEAD WATER TANK"
COVER WITH FRAME (HINGE & LOCKING
ARRANGEMENT)

SIZE (MM)	SIZE INCH (")
600MM ROUND	24" ROUND
600MM X 600MM	24" X 24"
600MM X 750MM	24" X 30"
600MM X 900MM	24" X 36"

AVAILABLE IN 500 KGS

UNDER GROUND WATER TANK COVER



COMPOSITE "UNDER GROUND" TANK
COVER WITH FRAME (WATER & AIR TIGHT
WITH DOUBLE SEAL & EPDM RUBBER
RING) (HINGED TYPE OPENING)

SIZE (MM)	SIZE INCH (")
560MM ROUND	22" ROUND
600MM ROUND	24" ROUND
600MM X 600MM SQUARE FRAME & ROUND COVER	24" X 24"

AVAILABLE FROM 2.5 TO 40 TONS
Double seal with EPDM

WATER TIGHT & AIR TIGHT | CORROSION RESISTANCE | LIGHTWEIGHT

RECESS COVER

Recessed manhole covers are utilized within paved area in order to hide inspection chambers, manhole and access fittings. When aesthetic value is required, Recessed manhole covers are vital when compared with regular manhole covers normally employed in modern construction.

RECESS MANHOLE COVER WITH FRAME (65MM DEPTH)	
SIZE (MM)	SIZE INCH(“)
450MM X 450MM	18” X 18”
450MM X 600MM	18” X 24”
600MM X 600MM	24” X 24”
450MM X 900MM	18” X 36”
600MM X 900MM	24” X 36”
RECESS MANHOLE COVER WITH FRAME (32MM DEPTH)	
600MM ROUND	24” ROUND
558MM X 558MM	22” X 22”
600MM X 600MM	24” X 24”



All sizes available from 2.5 tons to 40 tons
We also custom make different sizes as per your requirements.

GRATINGS



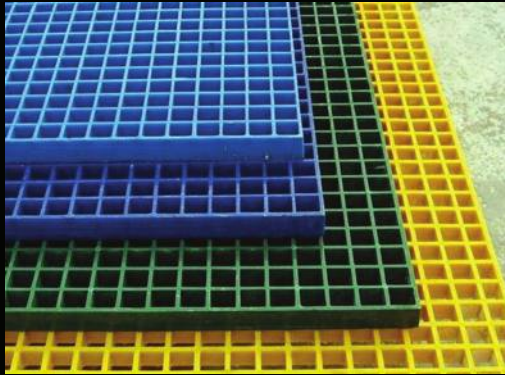
WATER GULLY COVER i.e. GRATING WITH FRAME (SET) & WITHOUT FRAME (ONLY GRATING)	
SIZE (MM)	SIZE INCH(“)
530MM ROUND	21” ROUND
600MM ROUND	24” ROUND
450MM X 450MM	18” X 18”
600MM X 600MM	24” X 24”
900MM X 900MM	36” X 36”
300MM X 600MM	12” X 24”
500MM X 600MM	20” X 24”
450MM X 900MM	18” X 36”
600MM X 900MM	24” X 36”
350MM X 1000MM	14” X 40”

DESIGNED FOR A STRONGER AND EASIER DRAINAGE SOLUTION

- Withstand Heavy Automotive Vehicle Load
- High Corrosion Resistance
- Zero Thermal Expansion
- Zero Scrap Value
- Longer Life
- High Water Flow
- Available in all standard sizes and colours.

All sizes available from 2.5 tons to 40 tons
We also custom make different sizes as per your requirements.

MOULDING GRATING



FRP STAIR TREDS

- Slip Resistant
- Corrosion Resistant
- Easily Fabricated
- Low Maintenance
- Low Installation Cost
- Long Service Life

FRP CHEQUERED GRATINGS

- Uniform texture and excellent quality
- Anti - skid property
- Minimum maintenance
- Fire Resistance
- Impact resistance
- Nil Ignition Source
- Thermally / Electrically Non - Conductive

ADVANTAGES	USAGE
Corrosion Resistant	Residential & Commercial Buildings
Bi-directional Strength	Chemical Plants
Slip Resistant	Refinery
Low Maintenance	Food & Pharma Industries
High Strength to Weight Ratio	Mining
Fire Retardant	Air & Water Pollution Control Plants
Lightweight	Swimming Pools
Impact Resistant	Walkways & Bridges
Long Service Life	Fencing & Signboards
Superior Ergonomics	Loading Platforms
Electrically and Thermally Non-Conductive	Mezzanine Floors
Low Installation Cost	Trench Covers
Available in Many Sizes and Colours	General Manufacturing Industries

WIDTH		LENGTH							
Holes	Width	Holes	Length		Holes	Length		Holes	Length
1	45	1	45		32	1263		63	2482
2	82	2	82		33	1300		64	2519
3	160	3	160		34	1339		65	2557
4	197	4	197		35	1377		66	2595
5	236	5	236		36	1415		67	2634
6	273	6	273		37	1454		68	2671
7	311	7	311		38	1492		69	2710
8	350	8	350		39	1530		70	2747
9	387	9	387		40	1568		71	2786
10	425	10	425		41	1606		72	2824
11	463	11	463		42	1649		73	2863
12	501	12	501		43	1681		74	2900
13	540	13	540		44	1720		75	2939
14	578	14	578		45	1758		76	2976
15	615	15	615		46	1796		77	3015
16	654	16	654		47	1834		78	3053
17	691	17	691		48	1872		79	3091
18	730	18	730		49	1910		80	3129
19	767	19	767		50	1948		81	3167
20	805	20	805		51	2024		82	3205
21	844	21	844		52	2062		83	3243
22	881	22	881		53	2100		84	3280
23	920	23	920		54	2139		85	3319
24	958	24	958		55	2176		86	3357
25	996	25	996		56	2215		87	3395
26	1034	26	1034		57	2257		88	3433
27	1073	27	1073		58	2291		89	3472
28	1111	28	1111		59	2329		90	3510
29	1149	29	1149		60	2366		91	3548
30	1187	30	1187		61	2405		92	3585
31	1225	31	1225		62	2444		93	3624

PLANTERS & PARGOLAS



All sizes available from 2.5 tons to 40 tons
We also custom make different sizes as per your requirements.

TESTING

GC TESTING

Gas chromatography (GC) is a common type of chromatography used in analytical chemistry for separating and analyzing compounds that can be vaporized without decomposition. Typical uses of GC include testing the purity of a particular substance, or separating the different components of a mixture (the relative amounts of such components can also be determined). HP runs all resin and release agents through GC to analysis priority and is the only player in the industry to carry out this practice. This helps us to control the quality of raw material that is used in our final product.



TENSILE TESTING

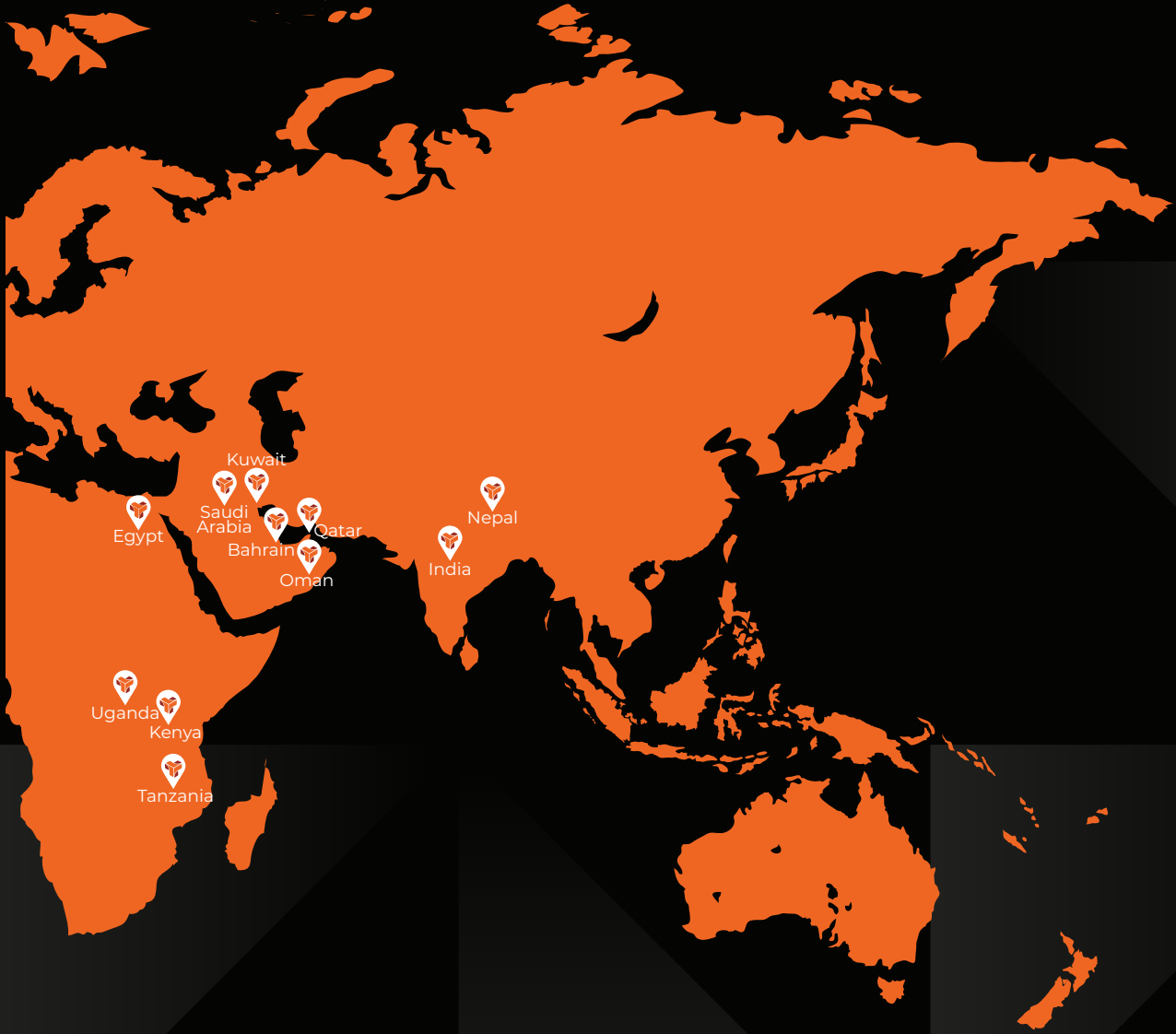
Tensile testing, also known as tension testing, is a fundamental materials science and engineering test in which a sample is subjected to a controlled tension until failure. Properties that are directly measured via a tensile test are ultimate tensile strength, breaking strength, maximum elongation and reduction in area. Here as well we use it to test the strength of all our fiber mat raw material and HP is the only one in this industry to follow this practice.

LOAD TESTING POST PRODUCTION

STRONG DRAIN FRP/GRP/COMPOSITE Manhole covers are tested for load bearing and permanent set as per BSEN 124:19991 and is 1726. BSEN 124 is a testing code world wide for Manhole covers in cast iron, ductile iron and other materials also. Permanent set is a multiple loading test to determine the permanent deformation in cover after multiple loading within a short time as specified in the code.

OUR EXPORTS





Egypt

Saudi Arabia

Kuwait

Bahrain

Qatar

Oman

India

Nepal

Uganda

Kenya

Tanzania

OUR FOUNDERS



As the owner of TOPAZ FRP, MR.HITESH PAGARIA who has an experience of more than 35 years is the driving force behind our success. With a keen entrepreneurial spirit.His dedication to excellence is not just a business philosophy; it's the cornerstone of our company culture.



At just 21 years old, MR.AMAN PAGARIA is the dynamic force behind TOPAZ FRP exemplifying the spirit of youthful innovation and entrepreneurial prowess. With a keen eye for emerging trends and a passion for industry, founded the company with a bold vision to redefine the game.



TOPAZ
FRP



For all walks of life...



TOPAZ

FRP



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