

LEADER IN QUALITY ROOFING SOLUTIONS



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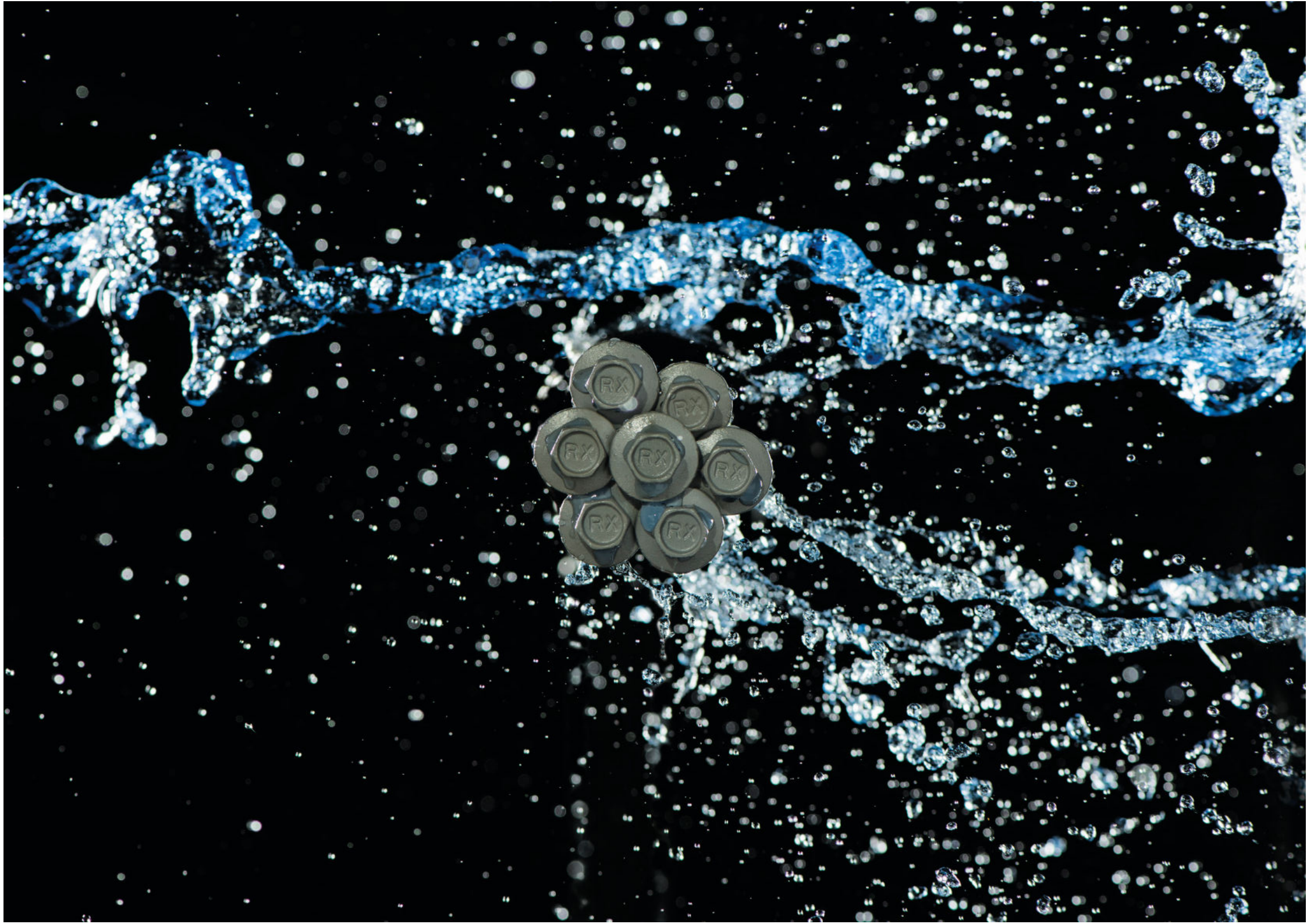
[www.roofix.in](http://www.roofix.in)

LEADER IN QUALITY ROOFING SOLUTIONS



CATALOGUE - ROOFING & CLADDING FASTENERS





A dynamic splash of water is captured against a solid black background. The water is in motion, creating a series of bright, white droplets and bubbles that trail from the bottom left towards the center. The lighting highlights the texture of the water, giving it a crystalline appearance.

to build your **BEST**  
you need **THE BEST**






REALM Intermediates ( Pvt) Ltd. is committed to being a partner with the roofing industry, having designed, developed and marketed contemporary standard fasteners and quality products in the Indian market since 1998.

During this over two decade long journey, REALM has earned a reputation in the industry for being a trusted representative for both national and international manufacturers.

That's because at REALM we realized long back that what often determines the success or failure of a

project, is the fastener. This spurred us on to channel our collective energy towards providing a quality range of fasteners and value added services that would not only speed up the construction, improve structural reliability, but also ensure performance under the most demanding weather conditions.

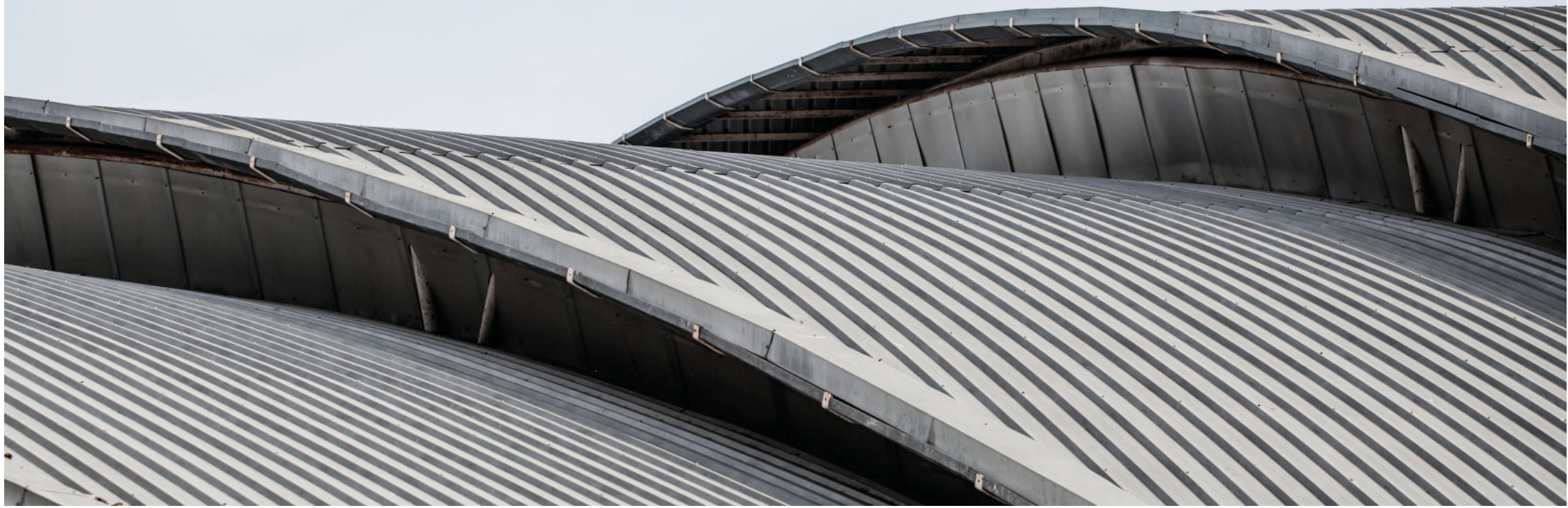
Staying true to our policy of being a partner to the roofing industry, we have strived continuously to excel and innovate and have provided roofing solutions to pre-engineered building industry, construction companies, solar industry, quality roofing contractors and various other industries.



**OUR VISION** is to be India's  
leader marketer for quality products  
company nationally and **BE AHEAD** of  
expectations of all its stakeholders.



Our mission is to protect 3M's  
**MEN, MACHINERY, MATERIALS**





At REALM we are committed to the following

- To supply our clients with not just products but support them with innovative solutions.
- To increase our clients' productivity and profitability, without compromising on quality.
- Sustaining our position as a market leader in quality construction fasteners.
- Meeting the expectations of a competitive market.
- Creating stake holder value with outstanding products, categorical assistance and assured safety standards.
- To create a culture in pursuit of excellence through continuous innovation and learning.
- To contribute positively to society.

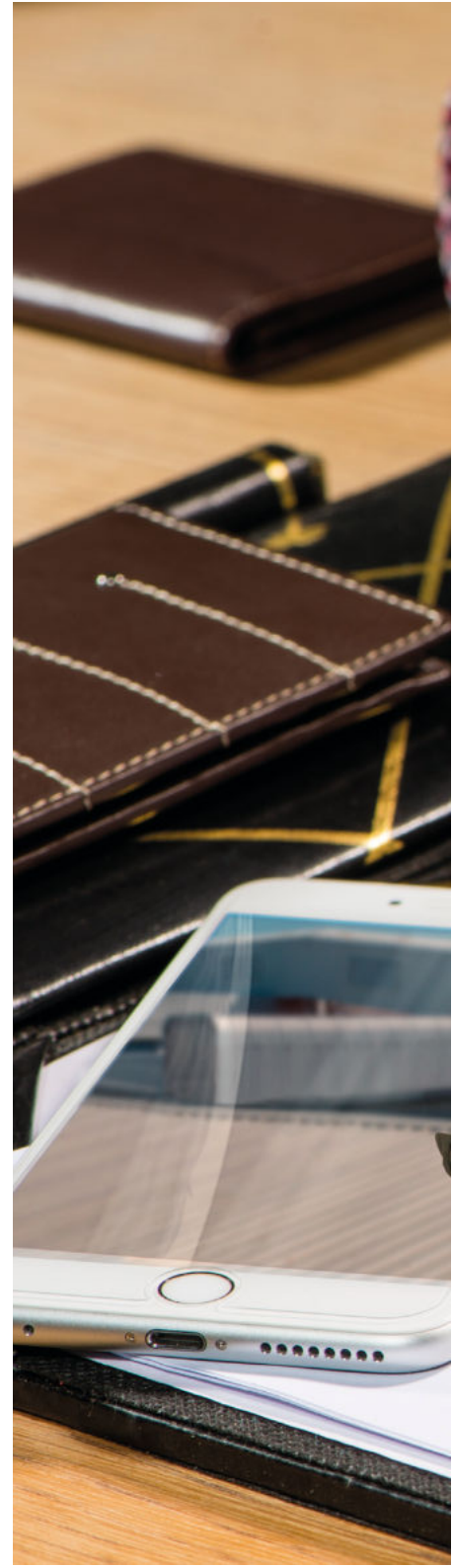


# WE safeguard YOUR investment

REALM does not compromise on quality and all our products are installed with True Blue EPDM Washers. Our products undergo the most stringent quality tests to ensure long lasting durability. In fact, we give 20 years warranty on all our products, to enable your structure to withstand the most extreme weather conditions.

We leverage our strong relationship with manufactures to create innovative and India-specific products. To ensure quality, we only import from ISO certified companies.

Recognizing that profitability is a key objective, we focus on value-for-money pricing, without compromising on quality.





Technical specifications table with columns for Item No., Description, and Unit Weight (KG/AD).

Item No.	Description	Unit Weight (KG/AD)
1.00	22X800K	3.30
3.00	22X800K	3.30
4.00	22X800K	3.30
5.00	22X800K	3.30
6.00	22X800K	3.30
7.00	22X800K	3.30
8.00	22X800K	3.30
9.00	22X800K	3.30
10.00	22X800K	3.30
11.00	22X800K	3.30
12.00	22X800K	3.30
13.00	22X800K	3.30
14.00	22X800K	3.30
15.00	22X800K	3.30
16.00	22X800K	3.30
17.00	22X800K	3.30
18.00	22X800K	3.30
19.00	22X800K	3.30
20.00	22X800K	3.30
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94.00	22X800K	3.30
95.00	22X800K	3.30
96.00	22X800K	3.30
97.00	22X800K	3.30
98.00	22X800K	3.30
99.00	22X800K	3.30
100.00	22X800K	3.30



200/12 Screws







# WE add value to YOUR project

Which client doesn't look for added value? We create that added value by offering a superior high quality of products and customer services. Our range of fast, convenient and cost effective products gives you that competitive edge.

Since most of the products mentioned here are stock items, they are readily available for shipment within 24 hours. The fact that we have authorized distributors across India makes for a hassle-free and quick delivery.

And when the investors are happy brings more goodwill and business to the architects, engineers and designers.

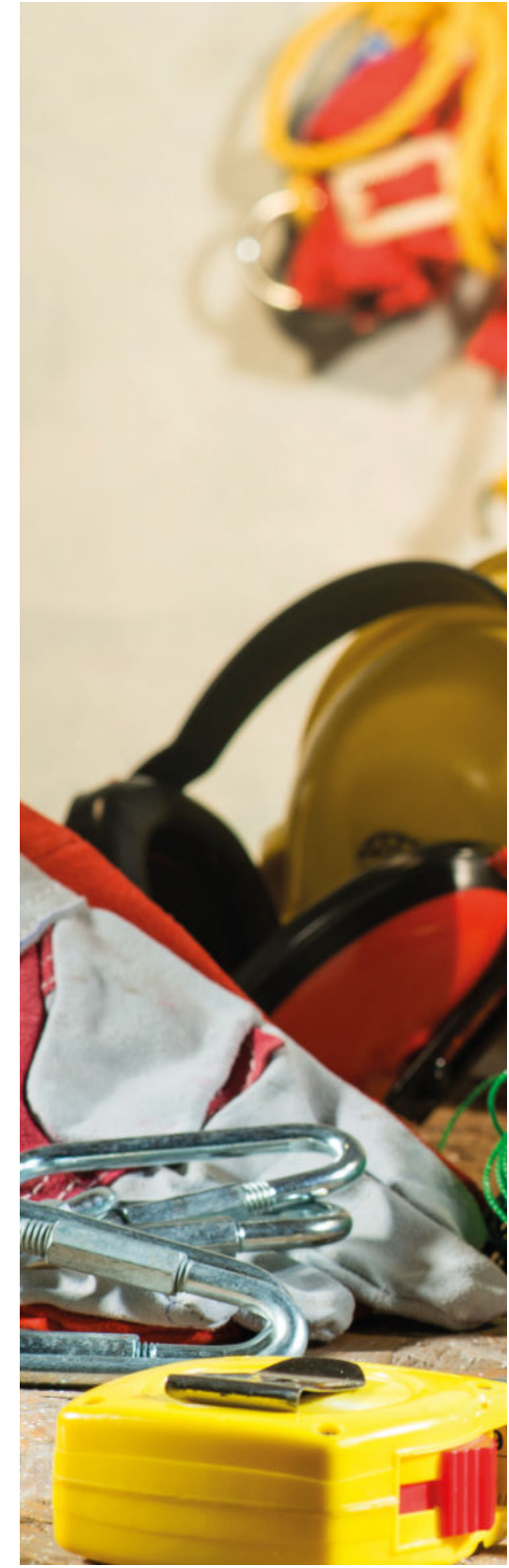


# WE make YOUR task easy

With so many options available in the market, how do you choose the correct fastener for your specific project? The Roofix fasteners are easy and faster to install. Thus saving time and effort for workers. Our application specialists will analyze your product design and provide detailed and reliable guidelines for choosing the most suitable fasteners for your needs. They also offer design and material options. In short, they tell you the right product for the right application.

Our commitment to you continues during and after construction. We optimize our services to you with logistical support. If a problem should arise, our technical teams are available to investigate the cause and suggest a viable solution.

We also offer special services like Head Painting. We can match any colour by using the best quality paint available to maximise adhesions and minimize chipping.











# PRODUCT RANGE

For more range of products please contact us.







QUALITY ROOFING FASTENERS





# STITCHING & ROOFING FASTENERS





## STITCHING FASTENER

### NEEDLE POINT



## STITCHING FASTENER

### DRILL TIP POINT

# STITCHING FASTENERS

### APPLICATIONS

For Overlapping of two metals roofing sheets to each other.

### MATERIAL

Case Hardened carbon Steel Rustshield Coating AISI 1002

### SEALING WASHER

EPDM Washer

### PLATING

Rust Shield coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating.

Tested in accordance to ASTM B117 & AS3566.

### HEAD

Hex washer Head

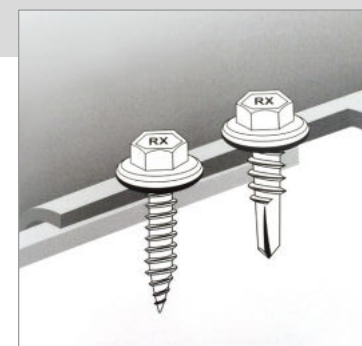
### ACCESSORIES

Power Fastener gun with speed under 3000 rpm.

Illustrated stitching fasteners application

Part Find	Description (GXTPIXL)	Point Type	Drill Thickness (mm)	Box Packing	Carton Qty.
	STITCHING FASTENER	HEX WASHER HEAD			
101	10G - 16TPIX20MM	Needle point	Sharp point	1000	8000
102	12G - 16TPIX20MM	Needle point	Sharp point	500	4000
103	10G - 16TPIX16MM	Drill point	#2	1000	8000
104	10G - 16TPIX20MM	Drill point	#2	500	6000
		metal bonded EPDM washer			

Common Fasteners sizes are mentioned above, For other sizes please contact us.





## ROOFIX Carbon Steel Fasteners are designed for fastening metal sheet to light to heavy section steel framing with or without intermediate insulation layers



### ROOFING FASTENERS

#### DRILL TIP POINT

##### APPLICATIONS

For fixing of horizontal / top metal roofing sheets to structural steel / secondary substrate is said to be roofing / crest fixing. The fixing is done on the crest / top of the metal sheet. Secondary substrate could be a cold rolled steel (z/c purlins square pipes with thickness not more than 4mm)



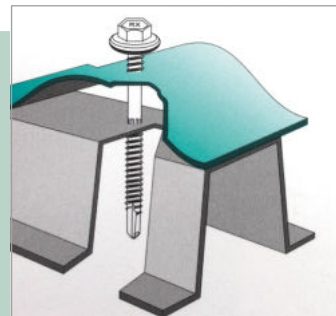
### CLADDING FASTENERS

#### DRILL TIP POINT

FASTENERS FOR STEEL THICKNESS LESS THAN 4.5MM

##### APPLICATIONS

For fixing of vertical metal roofing sheets to structural steel/secondary substrate is said to be wall cladding/valley fixing. The fixing is done on the valley between two tops on the roofing sheet. Structural Steels could be Cold Rolled Steel (i.e. purlins, square pipes with thickness not more than 4mm)



##### Coating

Coating is a Unique co-polymer coating that provides resistance than Zinc and Cadmium plating. Tested in accordance to ASTM B117 & AS 3566.

##### Material

Case hardened carbon steel Rust Shield Coating AISI 1022

##### Head

Hcx Washer Head

##### Sealing Washers

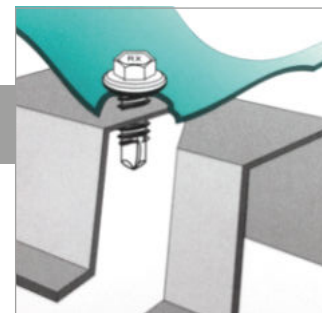
EPDM Washer

##### Accessories

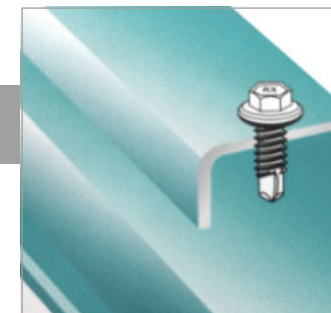
Power Fastener Gun Speed under 2500 RPM

F71 Find	Description (GXTPIXL)		Point Type	Drill Thickness (mm)	Box Packing	Carton Qty.	
STITCHING FASTENER		HEX WASHER HEAD					
201	10G - 16TPIX25MM	with washer	drill tip	#3	3.0 mm	500	4000
202	12G - 14TPIX25MM	with washer	drill tip	#3	4.5 mm	250	3000
203	12G - 14TPIX45MM	double threaded with edge guard	drill tip	#3	4.5mm	250	3000
204	12G - 14TPIX55MM	double threaded with edge guard	drill tip	#3	4.5mm	250	3000
205	12G - 14TPIX68MM	double threaded with edge guard	drill tip	#3	4.5mm	200	1600

Common Fastener sizes are mentioned above, For other sizes please contact us.



Illustrated stitching fastener application



# CR SERIES FASTENERS





# HR. SERIES FASTENERS

## FASTENERS DRILLING < THAN 8MM

### APPLICATIONS

For Fixing of Horizontal / Top metal roofing sheets to Structural Steel / secondary substrate is said to be Roofing / Crest Fixing. The fixing is done on the crest / top of the metal sheet. Secondary substrate could be a Cold Rolled Steel (Z/C Purlins Square Pipes, angles with Thickness not more than 8mm)

### COATING

Coating is a Unique co-polymer coating that provides resistance than Zinc and Cadmium plating. Tested in accordance to ASTM B117 & AS 3566.

### MATERIAL

Case hardened carbon steel Rust Shield Coating AISI 1022

### HEAD

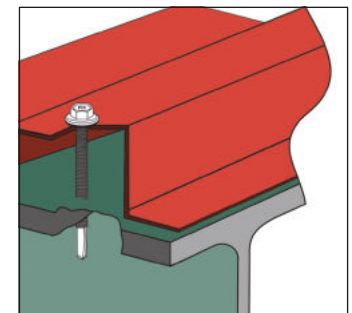
Hex Washer Head 8mm

### SEALING WASHERS

EPDM Washer

### ACCESSORIES

Power Fastener Gun Speed under 2500 RPM.



EZI Func	Description (GXTPIXL)		Point Type	Drill Thickness (mm)	Bx Packing	carton Qty.	
STITCHING FASTENER		HEX WASHER HEAD					
301	12G - 14TPIX30MM	Fully Threaded	drill tip	#3	8 mm	250	3000
302	12G - 14TPIX40MM	Fully Threaded	drill tip	#4	8 mm	250	3000
303	12G - 14TPIX45MM	Fully Threaded	drill tip	#4	8 mm	250	2000
304	12G - 14TPIX60MM	Fully Threaded	drill tip	#4	8 mm	200	1600

Common Fasteners sizes are mentioned above, For other sizes please contact us.

# HR SERIES FASTENERS



## FASTENERS DRILLING < THAN 12MM

### APPLICATIONS

For Fixing of Horizontal / Top metal roofing sheets to Structural Steel / secondary substrate is said to be Roofing / Crest Fixing. The fixing is done on the crest / top of the metal sheet. Secondary substrate could be a Hot Rolled Steel (i.e. I Beams/Angels/Channels with thickness varies from 4.5mm to 12mm). Carbon Steel Fasteners are designed for for fastening metal sheet to heavy section steel framing upto thickness of 12mm steel with or without intermediate insulation layers.

### COATING

Coating is a Unique co-polymer coating that provides resistance than Zinc and Cadmium plating. Tested in accordance to ASTM B117 & AS 3566.

### MATERIAL

Case hardened carbon steel Rust Shield Coating AISI 1022

### HEAD

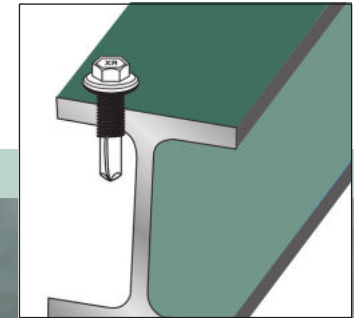
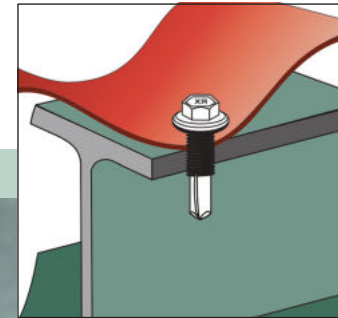
Hex Washer Head 8mm

### SEALING WASHERS

EPDM Washer

### ACCESSORIES

Power Fastener Gun Speed under 2500 RPM.



Part Find	Description (CXTPIXL)		Print Type	Drill Thickness (mm)	Box Packing	carton Qty.
	STITCHING FASTENER	HEX WASHER HEAD				
401	12G-24TPI x 32mm	Fully Threaded	Drill TIP	12.0mm	250	3000
402	12G-24TPI x 38mm	Fully Threaded	Drill TIP	12.0mm	250	3000
403	12G-24TPI x 50mm	Fully Threaded	Drill TIP	12.0mm	250	2000
404	12G-24TPI x 65mm	Fully Threaded	Drill TIP	12.0mm	200	1600
405	12G-24TPI x 70mm	Fully Threaded	Drill TIP	12.0mm	200	1600

Common Fasteners sizes are mentioned above, For other sizes please contact us.





# WAFER HEAD FASTENERS



**FASTENERS DRILLING < THAN 4.5MM**  
**DRILL TIP POINT**



**FASTENERS DRILLING < THAN 12MM**  
**DRILL TIP POINT**

## APPLICATIONS

*For fixing of clips to the secondary substrate. The Clips hold the roof.*

## MATERIAL

*Case Hardened carbon Steel Rustshield Coating AISI 1022*

## PLATING

*Rust Shield tm coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566.*

## HEAD

*Wafer Head*

## ACCESSORIES

*Power Fastener gun with speed under 300 rpm.*

CZI Find	Description (6XTPXL)		Point Type	Drill Thickness (mm)	Box Packing	carton Qty.
<b>WAVER HEAD FASTENERS</b>		<b>HEX WASHER HEAD</b>				
601	10G - 24TPIX25MM	Wafer Head Zinc Coated	drill tip	2.5 mm	1000	8000
602	10G - 24TPIX25MM	Wafer Head Rust shield Coated	drill tip	2.5 mm	500	6000
610	12G - 24TPIX32MM	Wafer Head Rust shield Coated	drill tip	12 mm	500	4000
<b>CSK WAVER HEAD FASTENERS</b>		<b>HEX WASHER HEAD</b>				
631	8G - 18TPIX25MM	CSK Wafer Head 6 Ribbed	Wing Teks	2 mm	1000	8000
632	8G - 18TPIX40MM	CSK Wafer Head 6 Ribbed	Wing Teks	2 mm	500	6000

*Common Fasteners sizes are mentioned above, For other sizes please contact us.*



# WAFER HEAD FASTENERS



## CSK WAFER HAED FASTENER

FASTENING FOR FIXING FIBRE CEMENT, CALCIUM SILICATE, GYPSUM & BISON BOARDS

### APPLICATIONS

*For direct fastening of different boards to steel*

### MATERIAL

*Case Hardened carbon Steel Rustshield Coating AISI 1022*

### PLATING

*Rust Shield tm coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566*

### ACCESSORIES

*Power Fastener gun with speed under 2600 rpm*





# FIBRE CEMENT FASTENERS

## FIBRE CEMENT FASTENER

### FASTENING FIBRE CEMENT SHEET TO STEEL STRUCTURE

#### APPLICATIONS

For Direct Fastening of fibre cement sheet to steel

#### MATERIAL

Case Hardened carbon Steel Rustshield Coating AISI 1022

#### SEALING WASHER

EPDM Dome Washer

#### PLATING

Rust Shield tm coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566

#### HEAD

Hex washer Head with Special wings

#### ACCESSORIES

Power Fastener gun with speed under 3000 rpm

EZ1 Find	Description (isKTP.XI.)			Part Type	Drill Thickness (mm)	Box Packing	Carton Qty.
	STITCHING FASTENER	HEX WASHER HEAD					
501	14G - 14TPIX90MM	DOME with washer	Drill Tip	#5	12mm	50	400
502	14G - 14TPIX100MM	DOME with washer	Drill Tip	#5	12mm	50	400
503	14G - 14TPIX110MM	DOME with washer	Drill Tip	#5	12mm	50	400

Common Fasteners sizes are mentioned above, For other sizes please contact us.

# POLYCARBONATE & FRP FASTENERS



## FASTENER FOR POLYCARBONATE DRILL TIP POINT (POLYFIX)

### APPLICATIONS

Self Drilling Fasteners PolyFix are used for Polycarbonate Sheet fixing

- Predrills and self centres during installation.
- Unique wing design cuts its own thermal expansion hole.
- Modified drill point allows application into both timber and steel.
- Save 50% on installation time.

### SEALING WASHER

DEKS engineered EPDM Dome Washer 26mm/32mm diameter

### PLATING

RustShield Coating is unique co-polymer coating that provides greater resistance than Zinc or cadmium plating. Tested in accordance with ASTM B117 and AS 3566. Chrome free Coating which is as per the European Standards.

### HEAD

Hex flange washer Head

### ACCESSORIES

Power Fastenergun with speed under 3000 rpm.



## FRP FASTENERS DRILL TIP POINT

### APPLICATIONS

Self Drilling Fasteners FRPFix are used for FRP Sheet fixing

- Predrills and self centres during installation.
- Unique wing design cuts its own thermal expansion hole.
- Modified drill point allows application into both timber and steel.
- Save 50% on installation time.

### SEALING WASHER

DEKS Engineered Weather-lok Washer

### PLATING

RustShield Coating is unique co-polymer coating that provides greater resistance than Zinc or cadmium plating. Tested in accordance with ASTM B117 and AS 3566.

Chrome free Coating which is as per the European Standards.

### HEAD

Hex flange washer Head

### ACCESSORIES

Power Fastenergun with speed under 3000 rpm.



EZI Fastener	Description (GXTPIXL)		Point Type	Drill Thickness (mm)	Box Packing	carton Qty.
POLYCARBONATE & FRP FASTENERS		WASHER HEAD				
510	M 6.50 X 50MM	Polycarbonate 26mm EPDM Washers	drill tip	5 mm	250	2000
511	M 6.50 X 65MM	Polycarbonate 26mm EPDM Washers	drill tip	5 mm	200	1600

Common Fasteners sizes are mentioned above, For other sizes please contact us.





# BIG TIP - CONCRETE - CSK HEAD FASTENERS





## BIG TIP SERIES FASTENER

### DRILL TIP POINT

#### APPLICATIONS

For fixing metal sheets with steel substrate over 12mm but <18mm

#### MATERIAL

Case Hardened carbon Steel Rustshield Coating AISI 1002

#### SEALING WASHER

EPDM Washer

#### PLATING

Rust Shield coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566.

#### HEAD

Hex washer Head

#### ACCESSORIES

Power Fastener gun with speed under 3000 rpm

***ROOFIX carbon Steel Fasteners  
are designed for fastening  
metal sheet to heavy section steel  
framing upto thickness of 12mm  
steel with or without intermediate  
insulation layers***

EZI Find	Description (GXTPIXL)			Print Type	Drill Thickness (mm)	Net Weight Box (KG/1000) approx	Carton Packing	Qty.
	STITCHING FASTENER	HEX WASHER HEAD						
250	12G - 24TPIX65MM	with washer	_____	#6	18mm	6.40	250	3000

Common Fasteners sizes are mentioned above, For other sizes please contact us.



# CONCRETE & WOOD FASTENERS



## CONCRETE FASTENER

### DRILL TIP POINT

#### APPLICATIONS

Self Drilling fastening to fix directly into pre drilled holes in concrete and brick, as well as pre-cast panels, lightweight cement blocks, without inserts or chemicals

#### MATERIAL

Case Hardened carbon Steel Rustshield Coating AISI 1002

#### SEALING WASHER

EPDM Washer

#### PLATING

Rust Shield coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566.

#### HEAD

Hex washer Head

#### ACCESSORIES

Power Fastener gun with speed under 3000 rpm



## WOOD FASTENERS

### DRILL TIP POINT

#### APPLICATIONS

Self Drilling fasteners for fastening Metal Sheets to woods.

#### MATERIAL

Case Hardened carbon Steel Rustshield Coating AISI 1002

#### SEALING WASHER

EPDM Washer

#### PLATING

Rust Shield coating is unique co-polymer coating that provides greater resistance than Zinc or Cadmium plating. Tested in accordance to ASTM B117 & AS3566.

#### HEAD

Hex washer Head

#### ACCESSORIES

Power Fastener gun with speed under 3000 rpm

EZ1 Find	Descript or (GX11' XL)	Drill Type	Drill Thickness (mm)	Box Packing	Carton Qty.	
TAPCON/WOOD FASTENER    HEX WASHER HEAD						
551	M6.3 x 32mm	HEX Washer Head Slotted	Drill Tip	12mm	150	1200
552	M6.3 x 58mm	HEX Washer Head Slotted	Drill Tip	12mm	150	1200
553	12G - 14TPIX65MM	Hex Washer head	Needle Tip	Type 17	150	1200
554	12G - 14TPIX75MM	Hex Washer head	Needle Tip	Type 17	150	1200
555	12G - 14TPIX90MM	Hex Washer head	Needle Tip	Type 17	150	1200

Common Fasteners sizes are mentioned above, For other sizes please contact us.



# STAINLESS STEEL & COMPOSITE PANEL FASTENERS

F71 Find	Description (GX*P XL)	Point Type	Drill Thickness (mm)	Box Packing	
TAPCON/WOOD FASTENER		HEX WASHER HEAD			
551	12G - 14TPIX80MM	HEX Flange Head	Drill Tip	4.5mm	150
552	12G - 14TPIX105MM	HEX Flange Head	Drill Tip	4.5mm	150
553	12G - 14TPIX135MM	HEX Flange Head	Drill Tip	4.5mm	100
554	12G - 24TPIX90MM	HEX Flange Head	Drill Tip	12mm	150
555	12G - 24TPIX110MM	HEX Flange Head	Drill Tip	12mm	100
556	12G - 24TPIX130MM	HEX Flange Head	Drill Tip	12mm	100

Common Fasteners sizes are mentioned above, For other sizes please contact us.

## STAINLESS STEEL FASTENERS

### DRILL TIP POINT

#### APPLICATIONS

Self Drilling Fasteners are available in Stainless Steel. These are custom made and are made available on order. The material is available in various grades (304 / 316 / 410). There is a SS Cap only offered on Carbon Fasteners. Fasteners made of Stainless are available. Bi-Metallic Fasteners are a combination of Carbon Steel Tip and Stainless Body.

#### SEALING WASHER

DEKS True Blue EPDM Washers

#### HEAD

Hex Flange Washer Head

#### ACCESSORIES

Power Fastenergun with speed under 300 rpm

## COMPOSITE PANEL FASTENERS

### DRILL TIP POINT

#### APPLICATIONS

Self Drilling Fasteners for Fastening Metal Sheets of Composite Panels.

#### SEALING WASHER

DEKS True Blue EPDM Washers

#### PLATING

RustShield Coating is unique co-polymer coating that provides greater resistance than Zinc or cadmium plating. Tested in accordance with ASTM B117 and AS 3556.

Chrome free Coating which is as per the European Standards.

#### HEAD

Hex washer Head 8mm

#### ACCESSORIES

Power Fastenergun with speed under 300 rpm







# WASHERS

*With 4.5 fasteners per square metre of roofing sheet, washers play a significant role in any roofing project.*

EPDM is the short form of Ethelene Propylene Diene Monomer. The American Society for Testing and Material (ASTM) classifies this material as an M class Polymer. Ethelen and Propylene oil and netural gas are orgenic building blocks of EPDM. When they are combined with diene, forms a large molecule and is very stable when exposed to sunlight, heat, ozone(UV) and moisture.

EPDM It is well suited for sealing due to its resistance to water, chlorinated water, dilute acids, alkaline, ozone and oxidising chemicals. It has a negligible absorbation rate, is not susceptible to swelling and can withstand temperatures upto 100C.

These qualities of the EPDM makes it the first choice for the leading fastener manufacturers. At REALM we recommend that the consumers ensure that the washer they purchase complies with industry standards and supports the life and integrity of the roofing system.

The right balance of hardnedd, tear strength and compression performance determine how well a cut washer assembles, compresses and resisits the tearing affects of swarf, and keeps thes crews sealed throughout its life on the roof.



# Why WASHERS matter?

*Because washers are small and relatively inexpensive, their importance in a roofing project is sometimes overlooked. But poor quality washers can result in enormous cost if it is badly designed and made of inferior material. Here's why:*

\* The washer is vital in maintaining the integrity of the roofing system.

\* There are four vital components to a good washer - design, material, conductivity and traceability.

\* Design - Early breakdown of the washers will result in, at best, the replacement of all fasteners and seals across the entire roof, and at worst, considerable water damage to the building.

\* Material - The secret of the DEKS washer is its premium EPDM (Ethylene Propylene Diene Monomer) blended with UV and Ozone stabilizers, curatives and processing oils. The blend is critical to sealing, UV resistance, life span and conductivity.

\*Conductivity – according to the Senior Principal Research Engineer, BHP RESEARCH -

“We have found that DEKS black EPDM washers exhibit exceptional levels of performance and provide complete compatibility with BHP Colourboard and Zincalume coated steels. A controlled level of carbon in this product provides superior mechanical properties and superior overall durability.”

\*Traceability - DEKS premium range of washers are always marked with the DEKS name or a registered feature such as the blue line.





### MULTI PURPOSE CUT WASHERS

- ✓ **Registered Deks Blue Line Marking**  
full traceability thanks to the Deks blue line
- ✓ **Superior quality EPDM**  
Made to last
- ✓ **Perfect for automatic assembly**  
Minimise downtime
- ✓ **UV and Ozone resistant**  
Maximum life span in Harsh environment
- ✓ **Non-conductive**  
Low carbon prevents corrosion problems.



### METAL BONDED WASHERS

- ✓ **A Metal face for Extra Strength**  
EPDM encapsulates a metal support for greater strength
- ✓ **Double Seal Design**  
Unique double seal acts under head and against the sheet surface
- 12mm to 32mm Size Range**
- ✓ A size to suit every fastener and roof system
- Engineered Load Distribution**  
Designed to minimise distortion
- Aggressive Environment**
- ✓ **Manufactured in Aluminium and Stainless Steel**  
for ultimate corrosion resistance

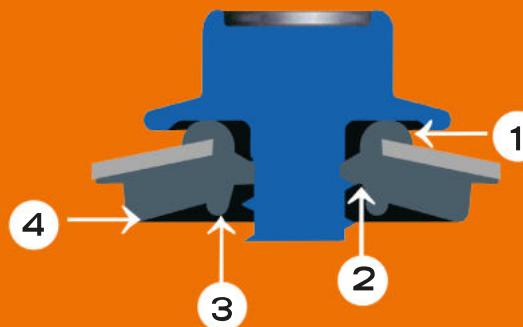


### POLYCARBONATE WASHERS

- ✓ **Engineered for Precision**  
Consistent Fit, Consistent performance
- ✓ **Seals tight-watertight**  
Efficient sealing between fastener and surface everytime.



### Four Sealing points for extra protection



*Each Dekfast washer is designed to seal in 4 locations. This seals both the roof and the fastener to provide ultimate security.*

*For sizes please contact us.*



# ACCESSORIES





## SOCKETS AND DRIVE BITS



### Range of drive bits and sockets for quality ROOFIX™ Fasteners

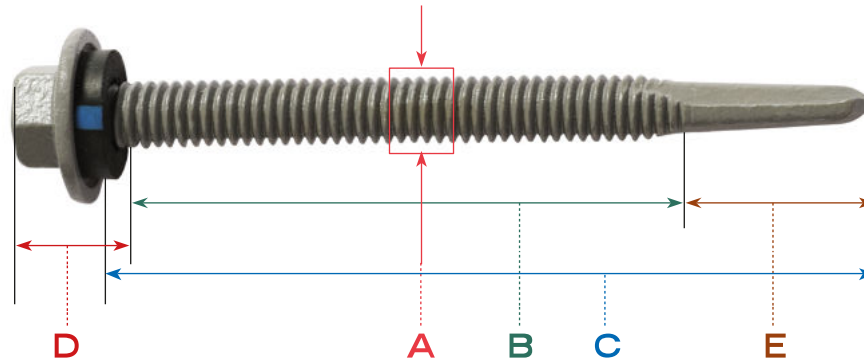
EZ1 Find	Description (CXTPIXL)	Box Packing
<b>HEXAGON SOCKETS</b>		
701	5/16" x 45mm	10
702	5/16" x 65mm	10
<b>PHILIPS DRIVE BITS</b>		
703	#2 x 50mm Single Head	10
704	#2 x 65mm Double sided	10

*FOR SOCKET SIZES UPTO 150MM LONG ARE STOCKED. FOR DETAILS PLEASE CONTACT US.*

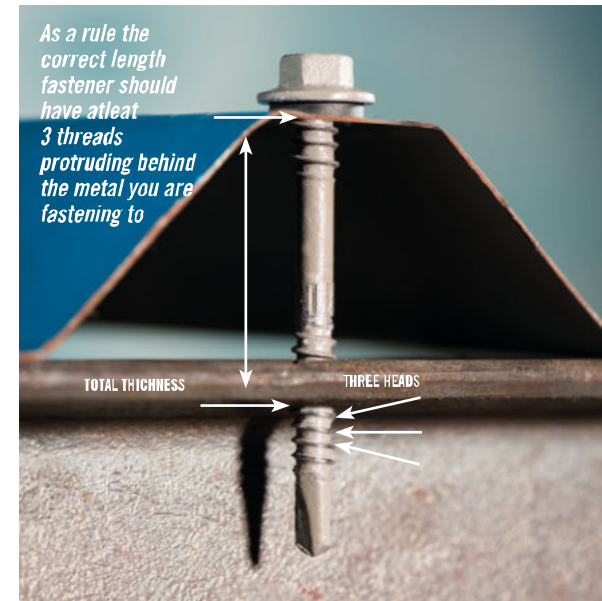




## Measurement of fasteners



12G - 14TPI x 60mm is better explained as  
12 Gauge • 14 Threads per Inch • 60 mm in Length



**A**

### THICKNESS OF FASTENER

Gauge: the gauge of A Fastener is determined by the basic size of the trade outside diameter

Standard Gouges:

10 gauge = 4.8 mm

12 gauge = 5.5 mm

14 gauge = 6.3 mm

**B**

### THREAD SELECTION

TheTPI is the number of thread crest that can be counted along a lineal measurements of 1 inch (25.4mm).

Always choose a faster with sufficient threads to fully engage in the base metal. The thickness of material being fastened and diameter of fastener determine the types of thread pitch to be used. In general, the thinner the fastened materials, the fewer the number of threads. The thicker the material, the greater the number of threads. Thinner base material requires a coarser thread pitch to assure proper clamping. The thicker the material, the finer the threads must be.

**C**

### LENGTH SELECTION

Length of the fastener (L)

Depending on the fastener head, there are two different ways to measure the overall length of a fastener.

For Hex Washer Head fastener the overall length is measured from the bottom of the collar under the head to the point of the fastener

For Wafer Head fasteners, the overall length is measured from the top of the head to the point of the fastener

**D**

### HEAD STYLE AND SIZES

There are three types of head

1. Hexagon head with washer face
2. wafer Head
3. Countersunk Rib Head

The right head with correct size should be used for optimum results

**E**

### DRILL POINT SELECTION

Drill point selection is based on following criteria.

1. Top Material to be Drilled
2. Bottom Material to be Drilled
3. Total Thickness to be Drilled
4. Void or Insulation



## THE CORROSION CHALLENGE

*That India is geographically surrounded by a 7000 km. coastline is a fact. That India is investing in industries and construction, involving metal usage in a big way, is also a fact. Put the two facts together and the conclusion is inevitable – that corrosion and its various fallouts will continue to be a major source of worry for the construction industry in India. So let's acknowledge the truth – that corrosion is a fact of life that cannot be wished away. So what exactly is this corrosion that strikes so much fear in the construction industry? Corrosion is an electro-chemical action, where one metal is changed into a chemical or is simply eaten away. Thus in the presence of air, water or salt, non-precious metals like steel, zinc, aluminium and copper undergo a process called oxidation (rusting) which slowly disfigures the metals rendering them unsafe and useless. Humidity and air pollution are the other factors that contribute to hastening the corrosion process.*

*Like death and taxes, corrosion is something we hope to avoid; but ultimately it is something we must learn to deal with.*

## THE DIFFERENT TYPES OF CORROSION

### GENERALIZED CORROSION (OXYGEN TYPE)

This is the most common and prevalent type of corrosion, where humidity and moisture results in electrolytic reactions developing on the steel surface, leading to progressive corrosion. The rate of corrosion increases rapidly in the presence of other pollutants and raised humidity levels. Galvanic corrosion (Hydrogen type) In this case, the combination of two dissimilar metals with an electrolyte (moisture) is all that is needed to form a reaction, where the less noble metal migrates and dissolves into the solution. Galvanic corrosion is also used for corrosion

prevention when a less noble metal like zinc is used to protect the carbon steel.

### BIOCHEMICAL CORROSION

When metals dissolve in acid and caustic solutions of different strengths, chemical corrosion occurs because metals tend to combine with oxygen to form oxides. The less noble the metal, the stronger the tendency. The attacking acids often come from the atmosphere. For example, the sulphuric acid that comes from the sulphur dioxide emissions from burning fossil fuels, is found in urban and industrial areas; nitric oxides, chlorine, hydrogen chloride, formic

acid, acetic acid, etc. are found in the vicinity of industrial plants, while chloride and sodium chloride especially, are common atmospheric pollutants in coastal regions.

### AERATION CELL CORROSION

An oxygen deficiency can develop in a damp thermal insulation or in any other situation when moisture is trapped and gathers pollutants. Corrosion will occur in the area of restricted oxygen supply, even in a non-polluted area of high pH value. Where other pollutants are present as in a lower pH value area, the corrosion will increase.

### THE COST OF CORROSION

Corrosion significantly affects the structural integrity of a construction. Premature deterioration or failure, results in greater maintenance, repair and replacement of damaged equipment. Besides this, costs also escalate, due to lost production hours and increased downtime of equipment; all arising from corrosion problems. Talking of cost, in India, the cost of corrosion has been estimated to be 3% of its GDP and that the roofing industry in particular, incurs a loss of no less than Rs. 360 crore annually.



# The choice of electrocoat over other coating techniques is usually driven by the lower total applied cost of electrocoat.

## **ELECTROCOATING FIGHTS CORROSION**

Electrocoating is an epoxy based organic polymer coating, which used electrical current to deposit the paint. The process works on the principle of 'opposite charges attract', wherein an electrocoat system applies a DC charge to a metal part immersed in a bath of oppositely charged paint particles. The paint particles are drawn to the metal part and the paint is deposited on the part, forming an even, continuous film of coating over

every surface, every crevice and corner, until the coating reaches the required thickness. The film insulates the part, electrical attraction stops and the electroplating is complete. Cathodic epoxy electrocoating has been widely used in the automotive industry for many years. REALM has adapted this process to fasteners and is now a benchmark for corrosion resistance in the construction industry.

## **ADVANTAGES OF ELECTROCOATING**

### **APPLICATION & PERFORMANCE**

- **Outstanding film uniformity** – consistent film on all part-to part surfaces.
- **Total coverage of complex parts configuration** – coating on all recessed area and sharp edges.
- **Precise film build control** – uses DC voltage to deposit paint only where it is needed.
- **Pre-assembly before coating** – less post paint rejects.
- **Wide range of products** – to meet corrosion, durability and other performance specifications.
- **Flexibility** – multiple part configurations can be coated in one tank without having to change the application equipment.
- **Recycled water** – closed-loop system reduces water loss.

### **ECONOMIC VIABILITY**

- **Totally automated process** – no direct labour.
- **Very high productivity** – dense and non-uniform line loading.
- **Very high transfer efficiency** – closed- loop rinse system approaches 100%
- **Lower energy requirements** – No dry-off oven, minimal exhaust equipment.
- **Minimal maintenance** – minimal hook cleaning, no 'booth' maintenance.
- **Lower insurance coverage** – no specific fire or health hazards.

### **ENVIRONMENT FRIENDLY**

- **Minimal solid wastes** – closed-loop system reduces paint loss.
- **Reduced fire hazard** – waterborne systems.
- **EPA compliance** – low or zero VOC and HAPS coatings.
- **OSHA compliance** – no special personal protection.
- **Cleaner application** – totally enclosed system





**Fasteners cost less than 1-2% of the total cost of the building. Yet this is the weakest link that connects the Metal Roof to the secondary substrates.**

## DECISION ANALYSIS

*Fasteners are critical components of a building. Choosing the right fastening system can prove decisive in terms of the longevity and safety of the roof. Through this brochure, REALM gives you a clear guide to the most suitable fasteners for different roofing applications.*

*Specifying the right fasteners, for the right application is critical, because inadequate fasteners can cause major defects in a project, including replacement of roofs, water leakage, damage to machinery and other construction related issues.*

*Since standard types and grades of fasteners are adequate in many construction applications; fastener selection is usually based on industry standards, building code requirements and design loads. In some cases, it is deemed feasible to leave the fastener selection to the discretion of contractors or building product fabricators, allowing them to select fasteners based on cost, convenience and trade practices.*

*However, with the emphasis now on long term performance of a roof and because builders and*

*engineers need to be able to depend on the durability, quality and performance of the fasteners that secure that roof; fastener selection has evolved into one of the most crucial aspects of the building design.*

*That is why expert judgement is required to choose fasteners that:*

- \*Perform as intended*
- \*Are dependable and economical*
- \*Last equal to or more than the life span of the building.*

**Factors effecting fastener performance include:**

- \*Structural capacity and safety factor.*
- \*State and dynamic load resistance.*
- \*Pull-out and pull-over resistance.*
- \*Shear resistance of fastener and attached materials.*
- \*Corrosion resistance in conditions of use.*
- \*Is a long term seal guaranteed?*
- \*Seal against liquid or gas leakage (if required).*
- \*Constructability, practicality and inspect ability.*
- \*Compatibility with design intent and aesthetics*
- \*Removability or other special requirements.*
- \*Service life exceeds that of attached materials.*





## Benefits of using ROOFIX self drilling fasteners “RX”

PRODUCT COATING	Only Single and best coating is offered.
AVAILABILITY	Ready Stock.
STANDARD	Made as per Australian Standard AS 3566.
COATING	Rust Shield Coating gives better corrosion Protection. 1000 hrs of Salt Spray Test as per ASTM B117-03. Minimum of 15 Cycles of Kesternich SO2 Testing ASTM G-87
EPDM WASHERS	Low Carbon TRUE Blue EPDM Washers last longer.
SOLUTIONS	Right Fasteners are offered based on the Applications and thickness of steel.
STRUCTURAL INTEGRITY	Fasteners hold roof sheets to the Purlin, protects roof sheets from Corroding, water leakage.
DUCTILITY	Fastener Core Hardness is Ductile
PACKAGING	Superior Packaging of Small Boxes. Small Boxes are Carton Packed at Factory in Taiwan. Product is labelled with Batch Numbers. Traceability of the product.
WARRANTY	Covered by ROOFIX Warranty for more than 20 years.
ROHS COMPLAINT	Environmentally Friendly



## PRODUCT WARRANTY

Roofix fasteners offer quality and performance with our range of Self Drilling Fasteners. The Rust Shield 3 coating that is standard on all our 'RX' marked Self drilling fasteners, is a protective coating and is meant to sustain well in a variety of climatic conditions. It's this confidence in our commitment that we do not foresee any defective fastener related problems. In the unlikely event that this may occur, Roofix fasteners undertakes to replace any such defective fasteners at no cost, subject to adherence to terms and conditions.



### APPROX LIFE IN YEARS

Not recommended



#### Very Severe Marine (ISO Category 5)

Includes off-shore area and up to 100m from high waterline area with breaking surf.

Not recommended



#### Severe Marine (ISO Category 4)

Generally includes areas from beach front to 300m Inland, but may extend further with prevailing winds, strong salt smell, Haze. Salt smearing and Salt build up in unwashed areas of structures are some of its characteristics.

6



#### Moderate Marine (ISO Category 3)

Generally between 300 and 1000 meter from marine surf, although strong prevailing winds may extend this distance. Airborne salt can be present but not visible as haze.

Not recommended



#### Very Severe Industrial (ISO Category 5)

Characterised by heavy fall-out and emissions from stacks, and strong sulphur and acid smells. Generally very high rate of corrosion in most building structure is evident.

Not recommended



#### Severe Industrial (ISO Category 4)

Area around major Industrial complexes characterised by heavy fall-out, strong sulphur and acid smells. Also includes buildings with high humidity and corrosions from operations within.

15



#### Industrial (ISO Category 3)

Characterised from fall-out from adjoining severe industrial environment or where small industries are congregated in large clusters.

25



#### Light Industrial /Urban (ISO Category 2- 3)

Area with light Industrial pollution and includes most Inland and cities. Away from environments, especially mentioned below, and between 500m from heavy industrial fallout.

30



#### Mild Urban/Rural (ISO Category 1-2)

Approx distance from marine Influences: 2-0 km.

### TERMS AND CONDITIONS

1. This certificate does **not** apply to product failure due to improper design or fastener selection, improper installation practice, in accordance with published installation practices, or when the environment or chosen location would **hasten the degradation** of the fastener.

2. Any alleged defects **must** be reported in writing after its inspection by **only ROOFIX** or its authorised inspectors.

3. Warranty shall not be applicable in the following circumstances:

- The system being damaged by natural disasters
- damage due to acts of negligence, accidents or misuse, including but **not limited to** vandalism, civil disobedience or acts of war.

4. The fastener **must** be used with compatible roofing and substrate material.

5. The warranty hereby states that the liability of ROOFIX shall only be **limited to the replacement of defective fasteners**. All such replacement and installation are to be carried out by ROOFIX approved agent or installer.

6. It's hereby made clear that no representatives of Roofix has authority to **make any representations or promises** except as stated here.

7. The warranty is **non-transferrable** from the original owner.



## Foam closures

To enhance the appearance and the weather tightness of the polycarbonate coverings, foam closure strips are recommended for sealing the opening created where the corrugated sheet meets flat surfaces at flashing, curbs, girts, etc. At Realm we offer custom made foam closure strips

### Double Side Foam Tape



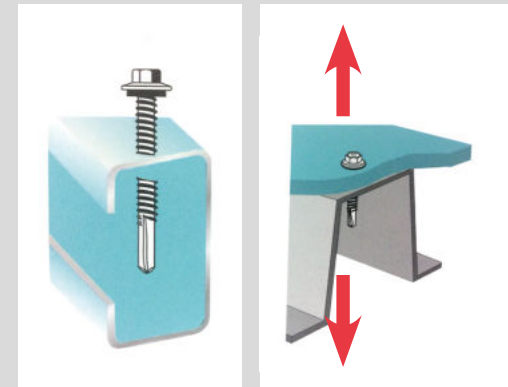
*Double Side Foam Tape is designed to for sealing metal overlap joints in the pre-engineered building industry. It is easy to apply and compress during installation. It exhibits excellent application and performance characteristics over a wide range of temperature. It will not become brittle, crack or flow during service. It is available in cut to use size and supplied in ready to use rolls.*

#### APPLICATION

*Double Side Foam Tape is designed to seal and prevent the entry of dust, air and moisture and assures a weather tight seal in sheet metal/polycarbonate buildings.*

- Metal Rib and end joint
- Sealing roof curbs, roof jacks and skylights
- Sealing polyethylene sheeting
- Metal to metal joints for centre fold roof

### Technical Specifications



#### Average Pullout Loads (Kilo Newtons kN)

*The load required to pull the fastener out of the material it is fastened into.*

*Roofix publishes a wide range of Technical performance data on it's fasteners. Generally the values give the ultimate value the engineer would then apply a safety factor appropriate to the regulations standards.*

*To determine the actual frequency of fasteners it is necessary that all loading criteria are made available to include wind load with this information available we can work it in close cooperation with the designers, the system supplier and the contractor to assist it determining faster frequencies.*

## Mechanical properties of Steel

Gauge	Thread per Inch	Min Axial force for withdrawal Kilp Newton	Min torque for torsional strength	
			Nm	in-Lbs
10G	16TPI	2.5	6.9	61
	24 TPI		7.3	65
12G	14 TPI	2.8	10.9	93
	24 TPI		11.3	100
14G	10 TPI	3.1	14.1	125
	20 TPI		17.6	156

Note: Data based on only fastener. Base material limitation not considered.

## ULTIMATE AVERAGE FASTENERS PULLOUT VALUES -POUNDS -LBS (KN)

Description	point	Standard Sheet Metal Thickness (mm)							
		26Ga	24Ga	22Ga	20Ga	18Ga	16Ga	14Ga	12Ga
	mm	0.457	0.610	0.762	0.914	1.219	1.524	1.905	2.692
08G-18TPI	2	.120	.197	.268	.301	.494	.702	.961	1.615
		.53	.87	1.19	1.34	2.2	3.12	4.17	7.17
10G-16TPI	2	.134	.218	.281	.340	.539	.741	.991	1.632
		.6	.97	1.25	1.51	2.4	3.29	4.24	7.25
10G-24TPI	2	.161	.238	.293	.324	.517	.1096	1.544	1.906
		.72	1.05	1.3	1.44	2.3	4.87	6.86	8.47
12G-14TPI	3	.142	.214	.296	.349	.580	.767	1.078	1.553
		.63	.95	1.32	1.55	2.57	3.4	4.79	6.90
12G-24TPI	5				.311	.452	1.060	1.288	1.844
					1.38	2.00	4.71	5.72	8.20

Applicable for available head type - PAN Head, Hex Head, Wafer Head, and Flat Head. For Design purpose lower value of pull out and tension strength of fastener to be consider.

## ULTIMATE AVERAGE FASTENERS PULLOUT VALUES -POUNDS -LBS (KN)

Description	Contact head Diameter	Standard Sheet Metal Thickness (mm)							
		26Ga	24Ga	22Ga	20Ga	18Ga	16Ga	14Ga	12Ga
	mm	0.457	0.610	0.762	0.914	1.219	1.524	1.905	2.692
08G-18TPI	8.5mm	348	551	723	933	1383	1383	1383	1383
		1.54	2.44	3.21	4.15	6.14	6.14	6.14	6.14
10G-16TPI	10.10mm	368	675	890	1105	1444	1444	1444	1444
		1.63	3.00	3.77	4.91	6.42	6.42	6.42	6.42
10G-24TPI	10.10mm	459	735	860	1004	1370	1395	1395	1395
		2.04	3.26	3.82	4.46	6.09	6.20	6.20	6.20
12G-14TPI	10.54mm	396	375	908	1009	1554	2016	2300	3882
		1.76	3.0	4.03	4.88	6.90	8.97	10.22	17.01
12G-24TPI	10.54mm				1057	1300	2216	3064	3970
					4.69	5.78	9.84	13.61	17.91

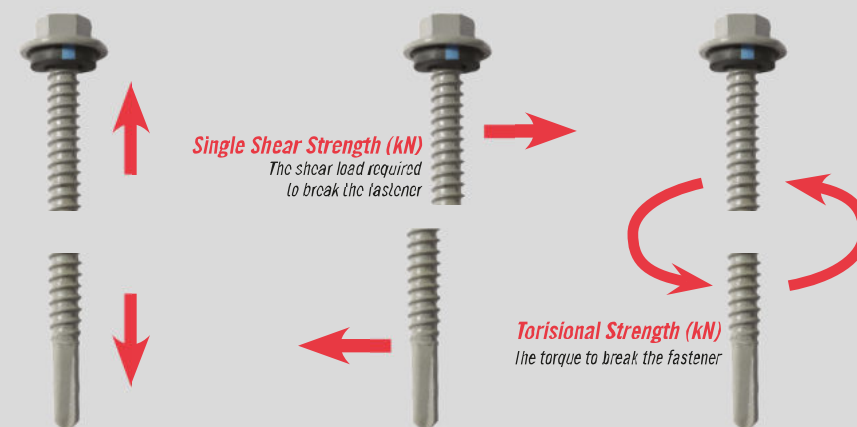
Applicable for available head type - Hex Washer Head Metal to Metal Application. For Design purpose lower value of pull out and tension strength of fastener to be consider.  
(to convert lbs force to Newton multiply values by 4.4482)

## Technical Specifications



### Axial Tensile Strength (kN)

The tensile load required to break the fastener



### ULTIMATE STRENGTH VALUES- CARBON STEEL CASE HARDENED PRODUCT

	TPI	Tensile Lbs. Min	Shear Avg Lbs. Ult.	Torque Min. In-Lbs
4.2mm/8G	18	1615	1100	42
4.8mm/10G	16	2200	1470	61
4.8mm/10G	24	2362	1535	65
5.5mm/12G	14	2950	1960	92
5.5mm/21G	24	2400	2275	100





ROOFIX

हम जोड़ते हैं



**C & P REALM INTERMEDIATES (PVT) LTD**

*concept-design-production*    **KRUTI DESIGN**

*photography*    **BAJI PAWAR**

*copy writing*    **JAISHREE MENON**

*printing press*    **PRAGATI ART PRINTS**

*we represent brands*

