

# gurbetçiler®

PLASTIC INDUSTRY AND TRADING COMPANY

the sought out name in spacers...

24  
YEAR





## ▶ PLASTIC ANTIRUST MARGIN COMPONENTS

### CLOTHESPIN TYPE PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0300120410	12/4-10	12	4-10	4.000	peces	13,8
0300150412	15/6-12	15	6-12	3.000	peces	11,8
0300200418	20/6-18	20	6-18	2.500	peces	10,8
0300250418	25/6-18	25	6-18	2.500	peces	14,0
0300300418	30/6-18	30	6-18	2.500	peces	13,7
0300301632	30/16-32	30	16-32	1.000	peces	12,9
0300351632	35/16-32	35	16-32	1.000	peces	13,4
0300400416	40/6-16	40	6-16	2.000	peces	16,4
0300500416	50/6-16	50	6-16	1.500	peces	13,4
0300501832	50/18-32	50	18-32	700	peces	15,8
0300751020	75/10-20	75	10-20	500	peces	10,4



0300751020

They are suitable to ensure antirust margin between the horizontal space of the form and construction components like flooring and beams. Types convenient to max and min antirust margin heights. They hold steels of all diameters easily and securely. They are components with high carrying power and stable.



0300120410



0300150412



0300200418



0300250418



0300300418



0300301632



0300351632



0300400416



0300500416



0300501832



### CRESCENT TYPE PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0350151218	15/12-18	15	12-18	3.000	peces	13,2
0350201418	20/14-18	20	14-18	3.000	peces	16,3

They are suitable to ensure antirust margin between horizontal forms and construction components like flooring and beams. They are used in places where rather small antirust margins.

### CRESCENT TYPE FLOORING PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0400200820	20/8-20	20	8-20	2.500	peces	12,5
0400250820	25/8-20	25	8-20	2.500	peces	15,5
0400300820	30/8-20	30	8-20	2.500	peces	18,9



They serve antirust margin elements used in separating the flooring and beam base reinforcements from the mold



## ▶ PLASTIC ANTIRUST MARGIN COMPONENTS



### SPECIAL NORM TYPE FLOORING PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0640250824	25/8-24	25	8-24	1.000	pieces	12,0
0640500824	50/8-24	50	8-24	500	pieces	12,0

They may easily be used at radial foundations and under beams. They do not overturn owing to the large sitting space. The strength is beyond disputes.



### NORM TYPE FLOORING PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0650200824	20/8-24	20	8-24	1.000	pieces	14,6
0650250824	25/8-24	25	8-24	1.000	pieces	15,4
0650300824	30/8-24	30	8-24	750	pieces	14,0
0650350824	35/8-24	35	8-24	700	pieces	15,2
0650400824	40/8-24	40	8-24	600	pieces	14,1
0650500824	50/8-24	50	8-24	500	pieces	14,1
0650600824	60/8-24	60	8-24	500	pieces	15,1
0650750824	75/8-24	75	8-24	400	pieces	14,8

They may easily be used at radial foundations and flooring steel with heavy outfits. They do not overturn owing to the large sitting space. The strength is beyond disputes.



### HARD TYPE NORM FLOORING PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0660502032	50/20-32	50	20-32	350	pieces	16,0
0660752032	75/20-32	75	20-32	250	pieces	15,7
0661002032	100/20-32	100	20-32	200	pieces	16,3

They may easily be used at radial foundations and flooring steel with heavy outfits. They do not overturn owing to the large sitting space. The strength is beyond disputes.



### CIRCULAR TYPE PLASTIC ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Outside Diameter Ø (mm)	Package		
				Amount	Units	Kg.
0700150150	15x150	15	150	500	pieces	10,6
0700200200	20x200	20	200	500	pieces	15,6
0700250200	25x200	25	200	500	pieces	20,8
0700300200	30x200	30	200	350	pieces	16,5
0700400200	40x200	40	200	300	pieces	16,5

They ensure great ease in steel meshes to be laid in large places. By placing steel mesh on antirust margins scattered around over form surface, the job is solved. When required to used on outfits of curtains and walls you can prevent to fall down by hanging the processes to steels at proper distance.

# PLASTIC ANTIRUST MARGIN COMPONENTS ◀

## PILE CAGE ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0100500812	50/8-12	50	8-12	150	pieces	10.6
0100750016	75/16	75	16	100	pieces	6.6
0100750012	75/8-12	75	8-12	100	pieces	8.8
0100750816	75/8-16	75	8-16	100	pieces	6.6
0101000020	100/20	100	20	30	pieces	8.3
0101251216	125/12-16	125	12-16	45	pieces	8.2



010 20114

Pile Cage Spacers are using to cast reinforced concrete piles and to improve floor. Steel Outfits are prepared suitable to pile hole which before pierced to floor. When the steel outfits is lifting down with helping the crab and the same strrup also putting down with minimum 4-5 pieces an done each distance, pile cage spacers facilitate to make a guide duty, it provide into ground of steel outfits and also maintain the correct cover when the concrete is poured or pumped.



0100500812



0100750016



0100750012



0100750816



010 00020

## PRE-CAST TYPE ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0150060032	6/2	6	2	10.000	pieces	3.4
0150750033	7,5/3	7,5	3	10.000	pieces	5.3
0150090036	9/6	9	6	5.000	pieces	5.6



They are special types preferred in the manufacturing of pre-cast building components where carrying power is not mostly important.

## FLOOR-CURTAIN TYPE ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0200250618	25/6-18	25	6-18	2.500	pieces	20.3
0200300618	30/6-18	30	6-18	1.500	pieces	14.7
0200400622	40/6-22	40	6-22	700	pieces	11.9



They are used in floor and curtains with heavy steel outfits. They hold every dimension of steel in a big range from 6 mm to 22 mm and additional processes on points both the steel is supported and the component touches the form increases the carrying power and stability of the component.

## HOOKED ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel To Use Ø (mm)	Package		
				Amount	Units	Kg.
0250250038	Hooked 25	25	8	1.500	pieces	10.8
0250300038	Hooked 30	30	8	1.500	pieces	15.4
0250350038	Hooked 35	35	8	1.500	pieces	12.5
0250500038	Hooked 50	50	8	1.500	pieces	13.3



They fastened with their special hooks to the crossing points of horizontally and vertically assembled steel outfits thus prevents fall down or overturn of them. They are preferred in movable and vibrating forms.



## ▶ PLASTIC ANTIRUST MARGIN COMPONENTS

### CURTAIN AND COLOUMN TYPE ANTIRUST MARGIN COMPONENTS

Code No.	Reference	Antirust Margin Height (mm)	Diameter of Steel to Use Ø (mm)	Package		
				Amount	Units	Kg.
0010100408	10/4 - 8	10	4-8	5.000	peces	13,5
0010101014	10/10-14	10	10-14	4.000	peces	11,3
0010150408	15/4-8	15	4-8	5.000	peces	14,1
0010150612	15/6-12	15	6-12	2.500	peces	18,8
0010200612	20/6-12	20	6-12	2.500	peces	18,0
0020250612	25/6-12	25	6-12	2.000	peces	14,4
0010250612	25/6-12	25	6-12	2.000	peces	17,0
0010251418	25/14-18	25	14-18	1.500	peces	16,2
0010300812	30/8-12	30	8-12	1.000	peces	13,2
0010301420	30/14-20	30	14-20	1.000	peces	18,3
0010350812	35/8-12	35	8-12	1.000	peces	13,6
0010401216	40/12-16	40	12-16	500	peces	10,8
0010500816	50/8-16	50	8-16	350	peces	11,6
0010501832	50/18-32	50	18-32	350	peces	17,3
0010600816	60/8-16	60	8-16	250	peces	8,6
0010750816	75/8-16	75	8-16	200	peces	8,6
0010752026	75/20-26	75	20-26	150	peces	8,0



0010250612

They have large ranges of use. They were used for long years not only in our country but also worldwide successfully. There are available types for steels of all diameters. Additional width given to antirust margin where the steel fits prevents it to be overturned. Due to its cage-like structure, they do not prevent concrete flow. Due to processes at outer side they contact the form very tightly so give a good finishing.



0010100408



0010101014



0010150408



0010150612



0010200612



0010251418



0010300812



0010301420



0010350812



0010401216



0010500816



0010501832



0010600816



0010750816



0010752026

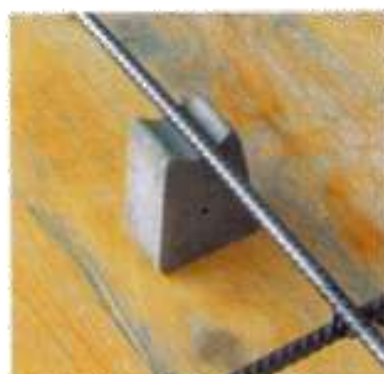
# Spacers



FRANK®

## Spacers without tying wire

made of fibre concrete for horizontal reinforcement



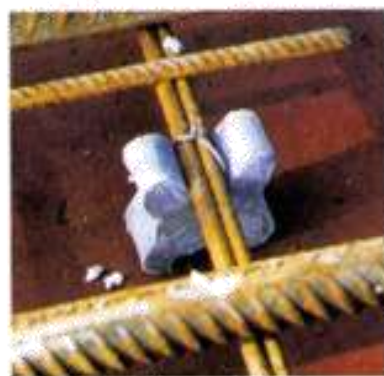
Spacer type 4013 without tying wire – can be used for horizontal single bar reinforcement or mesh reinforcement

	Article number	Type	Concrete cover mm	Cut width mm	Weight kg/1000 pcs.	Sack cont. pcs.
	AO1501	1501	15	24	27	1000
	AO2001	2001	20	24	34	1000
	AO2501	2501	25	24	47	500
	AO3001	3001	30	24	50	500
	AO3513	3513	35	28	69	500
	AO4013	4013	40	28	87	250
	AO4513	4513	45	28	99	250
	AO5013	5013	50	28	112	250
	AO5513	5513	55	28	127	250
	AO6013	6013	60	28	136	250
	AO6513	6513	65	28	141	125
	AO7013	7013	70	28	177	100
	AO7513	7513	75	28	188	100
	AO8013	8013	80	28	202	100
	AO8513	8513	85	28	210	100
	AO9013	9013	90	28	217	100
AO9513	9513	95	28	260	100	
AO10013	10013	100	28	273	100	
	AO1561	1561	15/20	24	32	1000
	AO2561	2561	25/30	24	45	500
	AO3563	3563	35/40	28	79	250
	AO4063	4063	40/45	28	97	250
	AO4563	4563	45/55	28	133	250
	AO5063	5063	50/60	28	140	250
	AO2071	2071	20/25/30	24	34	1000
	AO3573	3573	35/40/50	28	109	250
	AO4573	4573	45/55/60	28	179	125

Packaging: plastic woven sack, 40 sacks per pallet

## Spacers with tying wire

made of fibre concrete for horizontal and vertical reinforcement



Spacer type 3572 D – can be used for concrete covers 35/40/50 mm – this allows low stock quantities.

	Article number	Type	Concrete cover mm	Cut width mm	Weight kg/1000 pcs.	Sack cont. pcs.
	AD1501	1501 D	15	24	28	1000
	AD2001	2001 D	20	24	35	1000
	AD2501	2501 D	25	24	47	500
	AD3001	3001 D	30	24	52	500
	AD3512	3512 D	35	24	62	500
	AD4013	4013 D	40	28	90	250
	AD4513	4513 D	45	28	102	250
	AD5013	5013 D	50	28	115	250
	AD5513	5513 D	55	28	130	250
	AD6013	6013 D	60	28	136	250
	AD6513	6513 D	65	28	145	125
	AD7013	7013 D	70	28	180	100
	AD7513	7513 D	75	28	191	100
	AD8013	8013 D	80	28	205	100
	AD8513	8513 D	85	28	213	100
	AD9013	9013 D	90	28	220	100
AD9513	9513 D	95	28	263	100	
AD10013	10013 D	100	28	276	100	
	AD1561	1561 D	15/20	24	33	1000
	AD2061	2061 D	20/25	24	36	1000
	AD2561	2561 D	25/30	24	47	500
	AD3562	3562 D	35/40	24	68	250
	AD4062	4062 D	40/45	24	87	250
	AD4562	4562 D	45/55	24	119	250
AD5062	5062 D	50/60	24	123	250	
	AD2071	2071 D	20/25/30	24	35	750
	AD3572	3572 D	35/40/50	26	104	250
	AD4573	4573 D	45/55/60	28	182	125
	AG1561	1561 G	15/20	24	26	1000





## FORMWORK ACCESSORIES

### TIE ROD (COLD ROLLED)

VAISHNAV ENGG. WORKS

Material of Body	EN - 8/Mild Steel
Size	Dia 15/17mm
Length	in mtr : 1, 1.2, 1.5, 2, 3, 5.85, 6
Threading	DYWIDAG continuous hydraulic threading
Breaking Load	160 KN
Surface Finish	Natural with anti rust coating/electroplated

VAISHNAV ENGG. WORKS

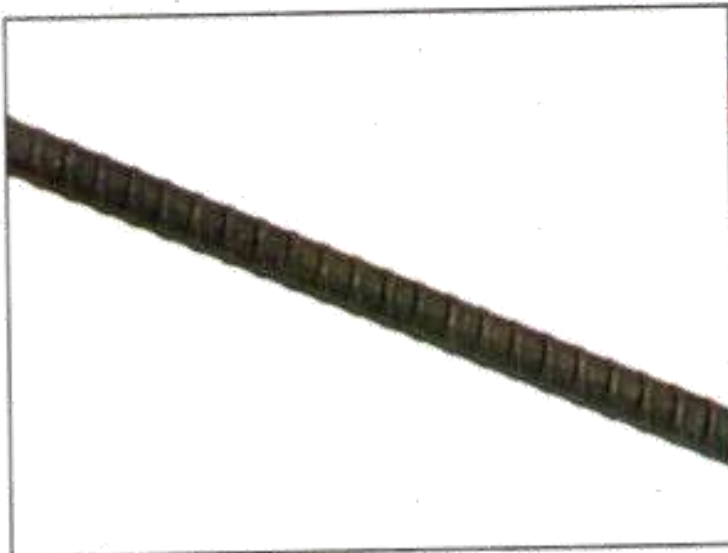


### TIE ROD (HOT ROLLED)

VAISHNAV ENGG. WORKS

Material of Body	EN - 8/Mild Steel
Size	Dia 15/17mm
Length	in mtr : 1, 1.2, 1.5, 2, 3, 5.85, 6
Threading	DYWIDAG hydraulic threading
Breaking Load	200KN / 180 KN
Surface Finish	Natural with anti rust coating.

VAISHNAV ENGG. WORKS

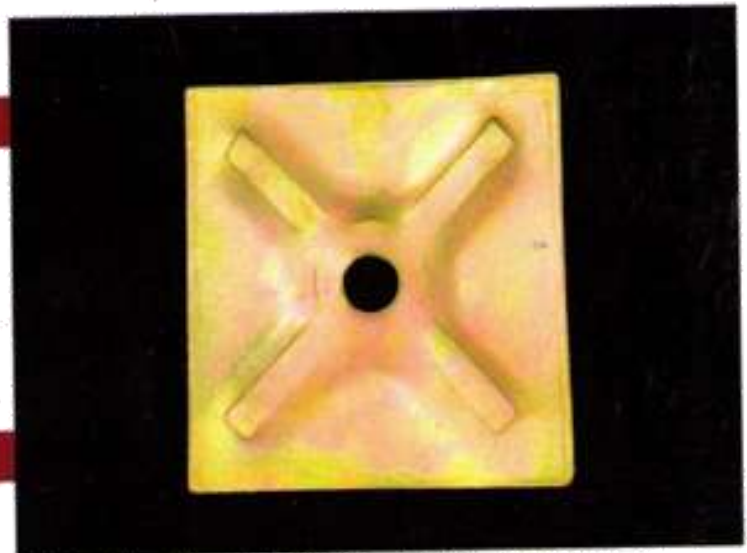


### BASE PLATE/WALLER PLATE

VAISHNAV ENGG. WORKS

Material	Mild Steel
Size	120mmX120mm
Thickness	in mm : 5, 5.5, 6, 8, 10
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

VAISHNAV ENGG. WORKS



## FORMWORK ACCESSORIES

### WING NUT (FORGED)

VAISHNAV ENGG. WORKS

Material	EN-8
Size	for Tie Rod Dia 15/17mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

VAISHNAV ENGG. WORKS



### WING NUT (CASTED)

VAISHNAV ENGG. WORKS

Material	Malleable Cast Iron
Size	for Tie Rod Dia 15/17mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

VAISHNAV ENGG. WORKS



### WATER BARRIER

VAISHNAV ENGG. WORKS

Material	Malleable Cast Iron
Size	for Tie Rod Dia 15/17mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

VAISHNAV ENGG. WORKS



## FORMWORK ACCESSORIES

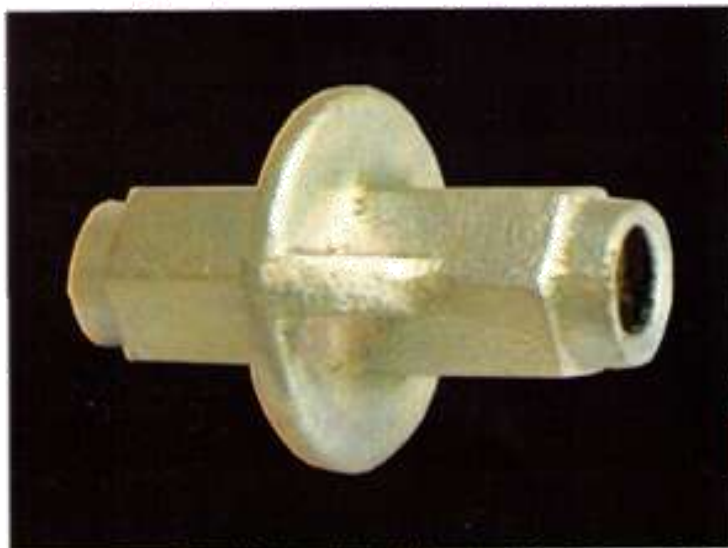
### TWO WING ANCHOR NUT/TIE NUT

VAISHNAV ENGG. WORKS

Material	Malleable Cast Iron
Size	for Tie Rod Dia 15/17mm
Die of Base	70mm/100mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

\*Also available in Three wings

VAISHNAV ENGG. WORKS



### WATER STOPPER

VAISHNAV ENGG. WORKS

Material	Malleable Cast Iron
Size	for Tie Rod Dia 15/17mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

VAISHNAV ENGG. WORKS

### RAPID CLAMP

VAISHNAV ENGG. WORKS

Material	Casted Body and Forged Wedge
Size	for dia of Rod : 8mm , 10mm
Surface Finish	Electroplated/Golden Passivated/ Painted

VAISHNAV ENGG. WORKS

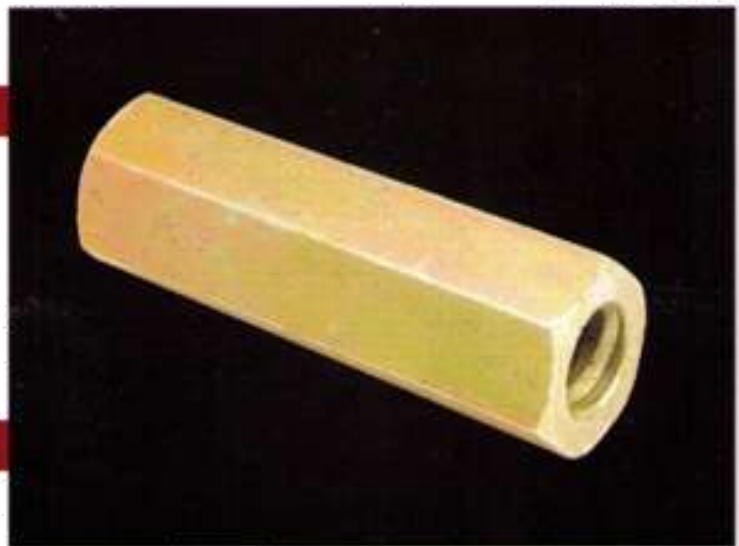


### HEX TIE NUT

VAISHNAV ENGG. WORKS

Material	Mild Steel
Threading	DIWIDAG thread for Tie Rod Dia 15/17mm
Length	in mm : 30, 50, 70, 100, 105
Surface Finish	Electroplated/Yellow Passivated/ Hot Dipped Galvanised

VAISHNAV ENGG. WORKS



### TWO WING ANCHOR NUT/TIE NUT

VAISHNAV ENGG. WORKS

Material	Malleable Cast Iron
Size	for Tie Rod Dia 15/17mm
Dia of Base	70mm/100mm
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised/ Natural with anti rust coating

\*Also available in Three wings

VAISHNAV ENGG. WORKS



### SHUTTERING CLAMP/ COLUMN CLAMP

VAISHNAV ENGG. WORKS

Material	Mild Steel
Size	Length (in mm) : 2.5', 3', 4' Thickness (in mm) : 4, 4.5, 5, 6, 8 Width (in mm) : 24, 25, 28, 30
Surface Finish	Electroplated/Golden Passivated/ Painted

VAISHNAV ENGG. WORKS



## SCAFFOLD FITTINGS

### DROP FORGED FIXED/RIGHT ANGLE COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - 8Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - 8Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



### DROP FORGED SWIVEL COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - 8Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - 8Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



### SHEETED FIXED/RIGHT ANGLE COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - 8Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - 8Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



## SCAFFOLD FITTINGS

### SHEETED SWIVEL COUPLER

VAISHNAV ENGG. WORKS

EN - 8/Mild Steel	Material of Body
Boron Steel/EN - 8/Mild Steel	Material of Nuts/Bolts/Rivets
Electroplated/Golden Passivated/ Hot Dipped Galvanised	Surface Finish
EN - 74/BS - 1139	Standards

VAISHNAV ENGG. WORKS



### SHEETED SINGLE COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - 8/Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - 8/Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



### DROP FORGED SINGLE COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - 8/Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - 8/Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



## SCAFFOLD FITTINGS

### TOE BOARD COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - S/Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - S/Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS -1139

VAISHNAV ENGG. WORKS



### SHEETED PUTLOG/WRAPOVER COUPLER

VAISHNAV ENGG. WORKS

Material of Body	EN - S/Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - S/Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS -1139

VAISHNAV ENGG. WORKS



### JOINT PIN

VAISHNAV ENGG. WORKS

Material of Body	EN - S/Mild Steel
Material of Nuts/Bolts/Rivets	Boron Steel/EN - S/Mild Steel
Surface Finish	Electroplated/Golden Passivated/ Hot Dipped Galvanised
Standards	EN - 74/BS -1139

VAISHNAV ENGG. WORKS



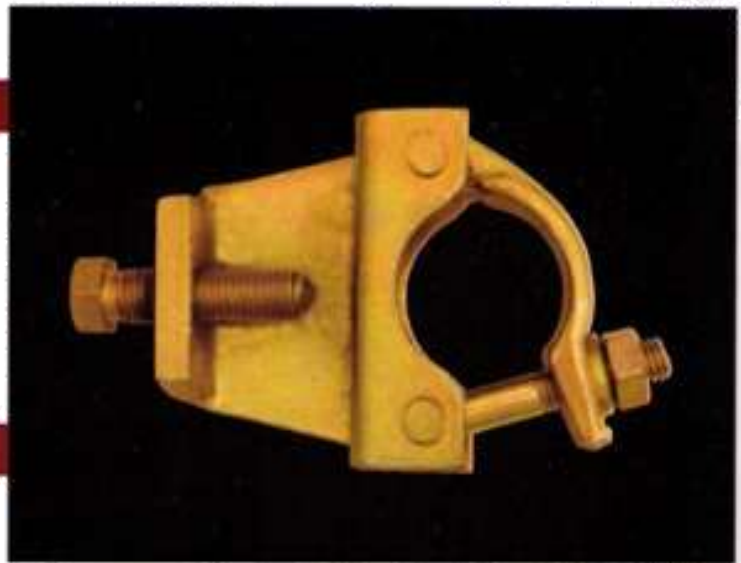
## SCAFFOLD FITTINGS

### GRAVELOCK COUPLER

VAISHNAV ENGG. WORKS

<i>Material of Body</i>	EN - 8Mild Steel
<i>Material of Nuts/Bolts/Rivets</i>	Boron Steel/EN - 8Mild Steel
<i>Surface Finish</i>	Electroplated/Golden Passivated/ Hot Dipped Galvanised
<i>Standards</i>	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



### SLEEVE COUPLER

VAISHNAV ENGG. WORKS

<i>Material of Body</i>	EN - 8Mild Steel
<i>Material of Nuts/Bolts/Rivets</i>	Boron Steel/EN - 8Mild Steel
<i>Surface Finish</i>	Electroplated/Golden Passivated/ Hot Dipped Galvanised
<i>Standards</i>	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS



### DROP FORGED PUTLOG/WRAPOVER COUPLER

VAISHNAV ENGG. WORKS

<i>Material of Body</i>	EN - 8Mild Steel
<i>Material of Nuts/Bolts/Rivets</i>	Boron Steel/EN - 8Mild Steel
<i>Surface Finish</i>	Electroplated/Golden Passivated/ Hot Dipped Galvanised
<i>Standards</i>	EN - 74/BS - 1139

VAISHNAV ENGG. WORKS







## Scaffold Clamps

Expandable Joint Pin



SC 135

Finish - electrogalvanized.

Spigot Pin



SC 136

Finish - electrogalvanized.

Universal Clamp



SC 137

Finish - electrogalvanized.

Timber Walling Clamp



SC 138

Finish - electrogalvanized.

Ladder Coupler



SC 139

Material - Made of Cast Iron or Forged Steel

# CFC Free

# ARNON BACKUP ROD™



## DESCRIPTIONS

DIMENSION	STANDARD PACKAGE / BAG
6	800 m/Bag ( 8 pcs x 100 m )
8	800 m/Bag ( 8 pcs x 100 m )
10	800 m/Bag ( 8 pcs x 100 m )
12	800 m/Bag ( 8 pcs x 100 m )
15	360 m/Bag ( 6 pcs x 60 m )
20	200 m/Bag ( 4 pcs x 50 m )
25	100 m/Bag ( 4 pcs x 25 m )
30	100 m/Bag ( 4 pcs x 25 m )
40	100 m/Bag ( 4 pcs x 25 m )
50	100 m/Bag ( 4 pcs x 25 m )
60	100 m/Bag ( 4 pcs x 25 m )

## APPLICATIONS:

- Used as a filler for decoration purposes.
- Used as an expansion joint and filler for precast, steel and concrete projects.

PROPERTIES	UNIT	VALUE	TEST METHOD
DENSITY	g/cm <sup>3</sup>	0.04	ASTM D-792
CELL SIZE	mm	0.82	ASTM D-3576
WATER ABSORPTION	mg/cm <sup>2</sup>	0.08	ASTM D-570
MOISTURE PERMEABILITY	g/cm <sup>2</sup> .24hr	0.5	ASTM D-570
ELONGATION AT BREAK	%	60	ASTM D-638
THERMAL CONDUCTIVITY	W/m <sup>2</sup> .°C	0.0406	ASTM D-5930
PERMANENT COMPRESSION SET (100 KG <sub>f</sub> / CM <sup>2</sup> )	%	1-2	ARNON METHOD

\* The recommendation in this bulletin is made without guarantee since the conditions of use are beyond our control.



## Shim Pads (Normal)

## SHIM PADS (NORMAL)

For levelling precast concrete parts and facade elements. To level and adjust concrete plates blocks etc., Compression proof without slit.



Thickness	Size	Packing (pc/bag)	Weight (kg/bag)
2 mm	70 x 70	1000	12
3 mm	70 x 70	1000	18
5 mm	70 x 70	500	15
10 mm	70 x 70	250	15

## Shim Pads (Horse shoe)

## SHIM PADS (HORSE SHOE TYPE)

Assembly plate with slit for assembly of construction components in precast concrete units. Horseshoe type shim pads fit around projecting bars.



Thickness	Size	Packing (pc/bag)	Weight (kg/bag)
1.5 mm	70 x 55	1000	6.00
2.0 mm	70 x 55	1000	8.00
3.0 mm	70 x 55	1000	10.00
5.0 mm	70 x 55	1000	15.00

Matl. : Polystyrene ( HIPS PS 330 )



## CAPU Rebar cap

- ✓ Mushroom-style rebar protective cap in bright color to prevent injuries from protruding rebars.

Item code	For bar diameter	Bar size	Pcs./Bag
CAPU16-32	16-32 mm	#5-#8	500



## EC Rebar cap

- ✓ Rounded rebar protective cap in bright color to prevent injuries from protruding rebars.

Item code	For bar diameter	Bar size	Pcs./Bag
EC8-16	8-16 mm	#2-#5	2,000
EC16-32	16-32 mm	#5-#8	100
EC25-40	25-40 mm	#8-#12	100



PC110



LB110

## PC110 OSHA Bar guard

- ✓ 3" x 4" square cover, approx. 4mm curved steel plate inside ensuring preventing injuries from protruding rebars.

- ✓ Capable of withstanding, at a minimum, the impact of a 250-pound weight dropped from a height of 10 feet without penetration and not crack.

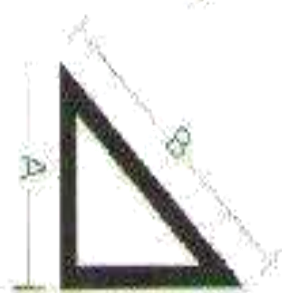
Item code	For bar diameter	Bar size	Pcs./Bag
PC110	8-32 mm	#3-#8	100
LB110	12-16 mm	#3-#6	100



## ECU Rebar cap

- ✓ Large rebar cap for big bar in bright color to prevent injuries from protruding rebars.

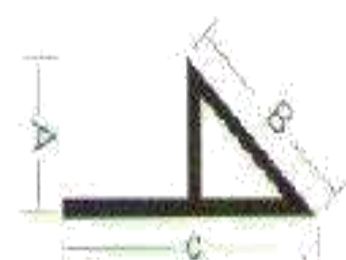
Item code	For bar diameter	Bar size	Pcs./Bag
ECU25-40	25-40 mm	#8-#12	100



## SJT PVC Chamfer without nail flange

✓ Used for forming chamfered corners to columns and beams, and features such as those on expansion joints on walls. Custom lengths are available.

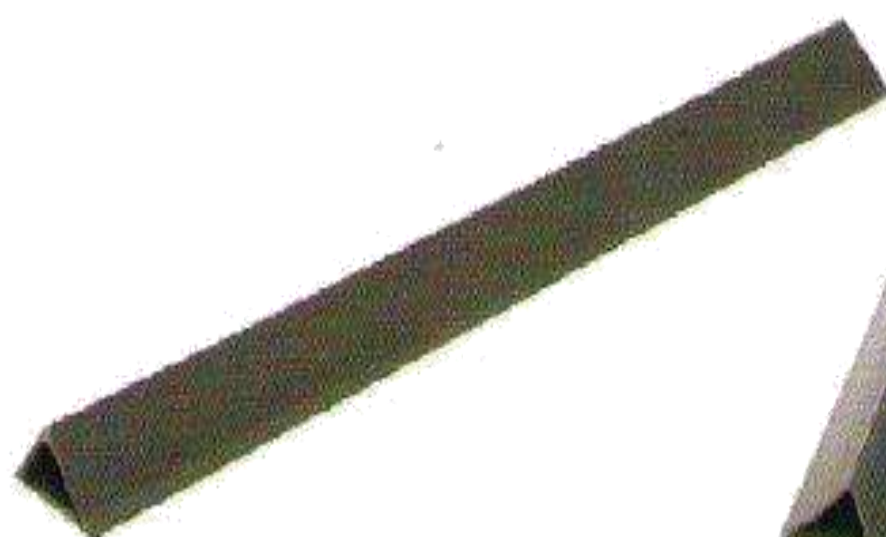
Item code	Size A	Size B	Length	Meters/bundle
SJT10	10	13.6	2.5 m	100
SJT15	15	20.4	2.5 m	50
SJT20	20	28.3	2.5 m	100
SJT25	25	33.3	2.5 m	50
SJT30	30	42.4	2.5 m	50



## SJT-B PVC Chamfer with nail flange

✓ Used for forming chamfered corners to columns and beams, and features such as those on expansion joints on walls. Custom lengths are available.

Item code	Size A	Size B	Size C	Meters/bundle	Meters/bundle
SJT-B10	10 mm	13.6 mm	25 mm	2.5 m	100
SJT-B15	15 mm	20.4 mm	37 mm	2.5 m	50
SJT-B20	20 mm	28.3 mm	37 mm	2.5 m	100
SJT-B25	25 mm	33.3 mm	48 mm	2.5 m	50
SJT-B30	30 mm	42.4 mm	53 mm	2.5 m	50
SJT-B40	40 mm	53 mm	60 mm	2.5 m	50



SJT



SJT-B

# ROOF TILE SPACERS



FRONT



BACK

ROOF TILES SPACERS ARE MADE FOR THE PURPOSE OF LAYING PAVEMENT TILES.  
THIS SPACER BLOCKS ARE MADE FROM HEAVY DUTY PLASTIC MATERIAL.  
SPACERS ARE FABRICATED IN SUCH A WAY THAT IT CAN BE SAPERATED IN TO 2 PARTS.

## DIMENSIONS

TOTAL DIA :	150 MM
FLAT BED THICKNESS	2 MM
GAP BETWEEN TILES	4 MM
TOTAL HEIGHT INCL. FLAT BED	13 MM

## RAW MATERIAL

POLY PROPYLENE PLASTIC RESIN

**LADEN BRAND SAUDI ARABIA** MADE INJECTION MOULDING HOMOPOLYMER GRADE  
VERY GOOD GLOSS.

ANTISTATIC PROPERTIES

BLACK COLOUR ADDED WITH ANTIFUNGAL CARBON.

## SPECIFICATION

MELT INDEX	11 G/10 MIN
YIELD TENSILE STRENGTH	35 Mpa
FLEXURAL MODULUS	1820 Mpa
HEAT DEFLECTION TEMPRETURE	104 ° C

## Connector Box (V S BOX) :

Handy steel box, simple removal of plastic cover and shuttering.

Optimal distribution of shearing stress achieved by individual boxes.



VX BOX	CABLE L x h mm	BOX h x l x b mm	Quantity pcs	Weight Kg / pc
VX - 080	80 x 215	20 x 50 x 160	100	0,21
VX - 100	100 x 215	20 x 50 x 160	100	0,22
VX - 120	120 x 215	20 x 50 x 160	100	0,23



# Jolly Bitulex

## Bitumen Fiber Joint Filler Board

Processed at the only Bitumen Board Mill in Asia



CERTIFIED  
ISO 14001:2004



CERTIFIED  
ISO 9001:2008

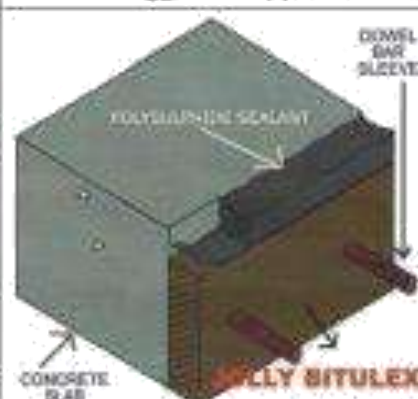
Jolly Bitulex is processed by Jolly Board Ltd; pioneers of soft board manufacture in Asia. Jolly Board has been manufacturing and exporting quality bitumen impregnated expansion joint fillers for the past 40 years.

Jolly Board Ltd, is an ISO 14001:2004 and ISO 9001:2008 certified company. (Head office in Mumbai, factories at Aurangabad & Sangli)

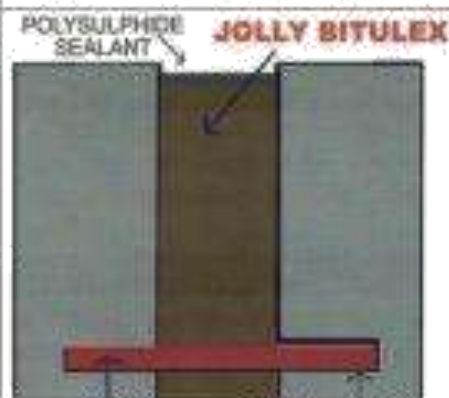
### CHARACTERISTICS : JOLLY BITULEX

- IS PROCESSED FROM **CANE FIBER AND BITUMEN**. THE COMBINATION OF THESE RAW MATERIALS ARE TESTED AND PROVEN TO PROVIDE THE BEST RESILIENCE TO WEATHERING CYCLE IN CONCRETE.
- IS MADE WITH SWEDISH MACHINERY AND TECHNOLOGY, DEVELOPED THROUGH YEARS OF INTENSIVE RESEARCH.
- IS AVAILABLE IN A WIDE RANGE OF THICKNESSES AND SIZES.
- IS AN ENVIRONMENT FRIENDLY PRODUCT MADE FROM WASTE AS OPPOSED TO THE ENVIRONMENT DESTROYING THERMOCOL/PLASTIC EXPANSION JOINT FILLERS.
- THE BOARD'S COMPRESSION AND RECOVERY CHARACTERISTICS CONFORM TO THE AMERICAN, EUROPEAN, BRITISH AND INDIAN STANDARDS.
- THE MOST ECONOMICAL PRODUCT ALTERNATIVE TO POLYETHYLENE IN DRY AREAS.

### Suggested Application Details for Typical Joints



3-D DIAGRAM



DOWEL BAR SLEEVE CONCRETE SLAB  
3-D DIAGRAM (SIDE VIEW)

Jolly Bitulex is brought flush with the concrete slab and extends full depth of the slab, placed approximately  $\frac{1}{4}$  of an inch below the surface of the concrete slab. A suitable sealant is applied either at the top or bottom of the slab to close the joint against hydrostatic pressure. The dowel bar is used to preserve alignment of adjacent sections of concrete slab. Jolly Bitulex is fabricated to receive dowel bars and the entire joint assembly is placed in position before pouring concrete.

### JOLLY BITULEX

confirms to the following required standards of expansion joint fillers:

- ASTM- D. 1751
- B.S. 6093
- IS 1838

### PHYSICAL PROPERTIES

that no other expansion joint fillers possess

### COMPRESSION

Jolly Bitulex when initially subjected to a load between 689 to 5171 kPa (or 100 to 750 PSI) in order to compress it by 50% of its original thickness, it shows a loss of not more than 0.1 to 0.2 % by weight.

(Permitted : less than or equal to 3% by weight).

### EXTRUSION

Jolly Bitulex when compressed to 50% of its thickness with 3 edges restrained, it shows an extrusion of not more than 1 to 2mm on its free edge. (Permitted : less than or equal to 6.4mm)

### RECOVERY

Jolly Bitulex when compressed to 50% of its thickness, it is observed that it recovers to 80-85% of its original thickness, within 10 minutes after the load is removed. Cane Fibre improves toughness and recovery properties. (Permitted : at least 70% or higher)

### UNAFFECTED BY TEMPERATURE CHANGES

Jolly Bitulex expansion joint filler holds its shape without appreciable dimension change when exposed to temperature extremes. It does not get soft at higher temperatures nor brittle at lower temperatures.

### APPLICATIONS:

- ✓ Expansion joint filler strips in all concrete traffic surfaces like highways, airport, runways and streets.
- ✓ Expansion joint fillers in driveways, aprons, pavements; curbs, gutters and other concrete paving work.



# TECHNICAL DATA SHEET

## SIZES

Standard sheet sizes:  
 7.3' x 4 ft - 2200 x 1220mm  
 8 x 4 ft - 2440 x 1220mm (Other sizes available on requests)

## BITUMEN CONTENT

35% Bitumen Content as per ASTM and other established standard, we also supply 10-20% Bitumen content as per customers' requirements.

## TICKNESS

10 - 12 - 18 - 25 mm

## QUALITY GUARANTEE

Strict monitoring by our on site quality control engineer.

### TECHNICAL TEST REPORT OF JOLLY BITULEX EXPANSION JOINT FILLER

TEST AS PER ASTM D1751		25 MM THICK 35% BITUMEN CONTENT
1. Dimension Thickness (mm)		25M
2. Compression		
a. Stress applied for compressing specimen to 50% of its thickness		2800-3200 KPa
b. Loss in Weight after application of Stress		0.1-0.2 %
3. Extrusion (mm) After compressing to 50% of the specimen's thickness		0.5mm
4. Recovery (%) 10 minutes after compressing to 50% of the specimen's thickness		75-80%
5. Density (kg/m <sup>3</sup> )		330-350
6. Water absorption (%)		15 %
7. Asphalt content (%)		36-37%
TEST AS PER ASTM D1751		18 MM THICK 20% BITUMEN CONTENT
1. Dimension Thickness (mm)		18.3M
2. Compression		
a. Stress applied for compressing specimen to 50% of its thickness		2400-2700 KPa
b. Loss in Weight after application of Stress		0.1-0.2 %
3. Extrusion (mm) After compressing to 50% of the specimen's thickness		0.5mm - 1mm
4. Recovery (%) 10 minutes after compressing to 50% of the specimen's thickness		82-85%
5. Density (kg/m <sup>3</sup> )		300-330
6. Water absorption (%)		50 %
7. Asphalt content (%)		20-23%

### DATA SHEET OF 10% JOLLY BITUMEN BOARD AS PER BRITISH STANDARD 6093

PROPERTY			SPECIFICATION	
			JOLLY BOARD	BRITISH STANDARD 6093 limits
1.	Density Range Kg m <sup>3</sup>	➤	270 to 300	200 to 400
2.	Pressure for 50% Compression N mm <sup>-2</sup>	➤	2.5 to 3.8	0.7 to 5.2
3.	Resilience % recovery after compression	➤	75 to 80	70 to 85
4.	Tolerance to water Immersion	➤	Suitable if immersion is infrequent	Suitable if immersion is infrequent