



TM

# FORMCRETE

## FIBERGLASS PRODUCTS

MANUFACTURER OF PRECISION  
FIBERGLASS COMPOSITE ASSEMBLIES



# MANUFACTURING CATALOG

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# MANHOLES

## ROUND HOLES FOR MORTAR JOINTS IN STANDARD PREMIUM

- For holes not intended for installation of field installed rubber connectors.
- Both through holes and partial indentation knock out formers available.
- Partial Hole/Knockouts must be ordered with attachment so they can be held tight to jacket wall.
- Hole form diameters do not represent specific inside pipe diameter applications.
- Hole diameters shown below are measured at the face of the Hole Form or at the inside radius of the manhole.
- Super Durable 5/16" overall fiberglass laminate thickness.
- Smooth surface concrete resistant polyester white gel coat for easier extraction.

*Manhole ID WALL	48" 5"	Wall Taper	60" 6"	Wall Taper	60" 8"	Wall Taper	72" 7"	Wall Taper	72" 8"	Wall Taper	84" 8"	Wall Taper	96" 9"	Wall Taper
Hole Dia.														
4"	4485	5.4												
5"														
7"	7485	10.6												
10"	10485	7.1	10606	7.1			10727	9.6						
12"	12485	10.6	12606	10.3			12727	10.9					12969	10.4
14"	14485	8.5	14606	10.9			14727	10.6						
15"	15485	8.5											15969	9.8
16"	16485	10.6	16606	10.0			16727	10.6						
18"	18485	11.0	18606	9.2			18727	10.1						
20"	20485	11.3	20606	10.6			20727	11.6						
21"	21485	9.9												
22"	22485	7.1	22606	10.3			22727	10.6			22848	10.8	22969	11.0
24"	24485	9.2	24606	10.5	24608		24727	8.9			24848	10.8		
26"	26485	16.4	26606	22.1			26727	18.1			26848	10.4		
27"					27608									
28"	28485	14.0	28606	21.9			28727	18.1			28848	10.4		
30"	30485	16.4	30606	18.4			30727	19.0						
32"	32485	17.0	32606	18.4			32727	18.5			32848	11.3		
34"	34485	16.7	34606	17.1			34727	19.9					34969	19.5
35"														
36"	36485	17.4	36606	20.6			36727	18.5	36728				36969	19.9
38"	38485	21.8	38606	18.4			38727	18.7						
40"	40485	19.9	40606	23.4			40727	24.3						
42"	42485	21.8	42606	21.1	42608		42727	17.4	42728				42969	20.0
44"	44485	22.4												
45"			45606	20.6			45727	24.1			45848	10.6		
48"			48606	21.1			48727	19.7	48728		48848	17.8	48969	19.9
52"			52606	19.2			52727	19.0						
55"			55606	18.4			55727	19.9			55848	9.5		
58"							58727	8.1			58848	9.5		
62"							62727	21.4						
64"							64727	14.3						
72"											72848	10.0		
74"														
76"														

\* We can create a custom sized mold that is not currently listed in this table.

# ROUND FIBERGLASS FORMS FOR MORTAR JOINTS

## STANDARD PREMIUM STRAIGHT WALL/ FLATWALL STRUCTURES

- For holes NOT intended for field installed rubber connectors.
- Both through holes and partial indentation knock out forms available
- Partial hole/ knockouts must be ordered with attachment so they can be held tight to jacket wall.
- Hole form diameters do not represent specific inside pipe diameter application.
- Super durable built at 5/16" laminate thickness with a concrete resistant glossy white polyester gelcoat.

Wall Thickness	6 Inch Wall	Wall Taper	8 Inch Wall	Wall Taper	12 Inch Wall	Wall Taper
Hole Form Face Dia. (Inner toward core)	Part No.	Degrees	Part No.	Degrees	Part No.	Degrees
4"	46	10	48	10		
5"	56	6				
6"	665	5	68	5		
6"	66	15				
8"	86	20	88	10		
10"	106	10	108	10		
12"	126	12	128	12		
14"	146	10	148	10		
15"	156	10	158	10	1512	10
16"	166	10	168	10		
18"	186	10	188	10	1812	10
20"	206	10	208	10	2012	10
21"	216	10				
22"	226	10	228	10	2212	10
23"	236	10				
24"	246	5 or 15	248	15	2412	5
25"	256	3				
26"	266	10	268	10	2612	5 or 10
27"	276	5	278	5		
28"	286	10	288	10	2812	10
30"	306	10	308	10	3012	5
32"	326	10	328	10	3212	10
34"	346	10	348	10	3412	10
36"	366	10	368	10	3612	10
38"	386	20	388	20	3812	10
40"	406	18	408	18		
41"	416	10	418	10		
42"	426	10	428	10	421210	10
44"	446	14	448	14		
46"	466	14	468	14		
48"	486	10	488	10		
52"	526	6	528	6		
55"	556	5	558	5		
58"	586	5	588	5		
60"	606	5	608	5		
62"	626	10	628	10		
65"	656	10	658	10		
70"	706	10	708	10		
72"	826	10	728	10		
78"	786	10	788	10		

\* We can create a custom sized mold that is not currently listed in this table.

Revised: 6/12/2023

October 4, 2024

## **TECHNICAL BULLETIN**

### **BENEFITS OF USING FORMED/TAPERED HOLES IN PRECAST CONCRETE DRAINAGE STRUCTURES**

With each passing year we hear more customers comment that specifiers are requesting tighter annular spaces between holes in precast drainage structures and the installed pipe's OD. And in some extreme cases, disallowing tapered holes for grouted pipe connections in precast concrete drainage structures.

It's easy to understand a Civil Engineer's viewpoint in regards to this as it pertains to structural considerations and minimum cover.

How this affects the water tightness of the joint is obviously of little consideration or is evidence of some Civil Engineers lack of experience as to what really goes on in the trenches.

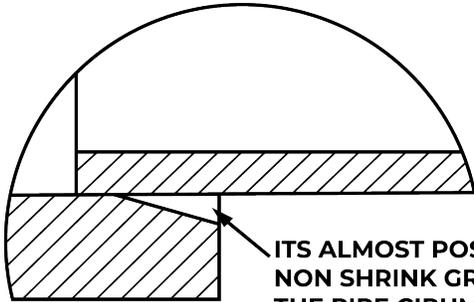
As owners, managers and supervisors, we understand "process/ procedural controls" must be in place to insure a successful result. In the case of a grouted pipe to precast drainage structure connection, we know the procedure/work instruction might read, "Shim bottom of pipe up/off lowest point of hole to insure annular space is equal around circumference of the installed pipe. But as owners, managers and supervisors, we also understand the installation crew will likely take the quickest and easiest route and simply allow the installed pipe to rest on the bottom of the formed or cored hole prior to grouting it. The worst possible scenario of this would be a formed or cored hole where absolutely no taper exists on the hole's bore. This is where no sufficient "control" existed allowing an unsatisfactory seal to be made.

This is a good argument for using formed tapered holes in precast concrete drainage structures intended for non-shrink grout pipe connections. The hole's tapered bore actually "controls" with no oversight or inspection preventing a poorly installed/sealed grouted hole.

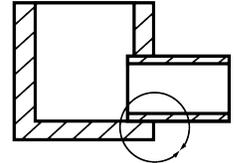
We have created this technical bulletin to provide our customers some basis of argument if and when the topic arises.

## JOINT WITH TAPERED HOLE

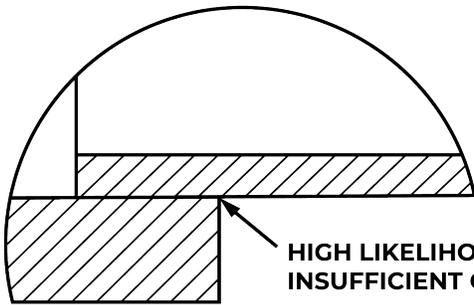
- The wedge space between pipe wall and hole enhances compressive forces driving the grout deeper into the joint without resistance
- The effect greatly improves the joint when a corrugated or ribbed OD pipe is used.
- When Butyl sealant is used as a water stop, the resulting wedge can stop the inward movement allowing the outer gap to be filled with non shrink grout



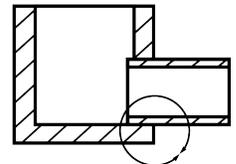
ITS ALMOST POSSIBLE TO BE MISSING  
NON SHRINK GROUT ANYWHERE AROUND  
THE PIPE CIRUMFERENCE WITH A FORMED/ TAPERED HOLE.



## JOINT WITH NON-TAPERED HOLE



HIGH LIKELIHOOD OF NO GAP OR  
INSUFFICIENT GAP TO RECEIVE GROUT.  
RESULTING IN A LEAKING JOINT.

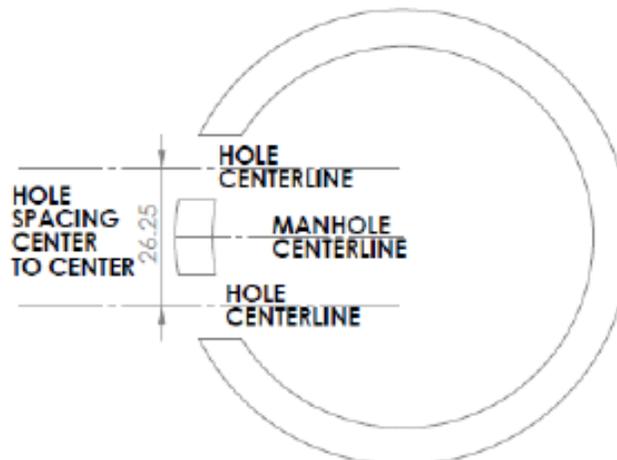




# LOW DRAFT/ MINIMUM TAPER

2° WALL TAPER TO ACCOMMODATE THE INSTALLATION OF FLEXIBLE RUBBER MANHOLE CONNECTORS\*

DIA.	MANHOLE	SPACING	PART NO.
7"	48 x 5	18"	7L485P
7"	60 x 6	20"	7L606P
7"	72 x 7	26.25"	7L727P
8"	48 x 5	18"	8L485P
8"	60 x 6	20"	8L606P
8"	72 x 7	26.25"	8L727P
8"	84 x 8	26.25"	8L848P
8"	84 x 8 3/4	26.25"	8L848 3/4P
8"	96 x 9	26.25"	8L969P
8"	96 x 9 3/4	26.25"	8L969 3/4P
8"	120 x 11	26.25"	8L12011P
8"	120 x 11 3/4	26.25"	8L12011 3/4P
8"	144 x 13	26.25"	8L14413P
8"	144 x 13 3/4	26.25"	8L14413 3/4P
12"	60 x 6	26.25"	12L606P
12"	72 x 7	26.25"	12L727P
12"	84 x 8	26.25"	12L848P
12"	84 x 8 3/4	26.25"	12L848 3/4P
12"	96 x 9	26.25"	12L969P
12"	96 x 9 3/4	26.25"	12L969 3/4P
12"	120 x 10	26.25"	12L12010P
12"	120 x 11 3/4	26.25"	12L12011 3/4P
12"	144 x 13	26.25"	12L14413P
12"	144 x 13 3/4	26.25"	12L14413 3/4P
16"	72 x 7	26.25"	16L727P
16"	84 x 8	26.25"	16L848P
16"	96 x 9	26.25"	16L969P



\* These are for parallel holes as shown in the image above.

# PROPER CONNECTOR DEPTH PLACEMENT WITHIN THE HOLE FORMED BY OUR L-SERIES HOLEFORMS

THE FOLLOWING TABLE NOTES THE PROPER DEPTH OF THE CONNECTOR'S SERRATED SEALING SURFACE'S CENTER. NOTE: THE SERRATED SEALING SURFACE OF MOST CONNECTORS IS 2" DEEP. THEREFORE THE CENTER WOULD BE 1" IN FROM THE INNER EDGE OF THE CONNECTOR.

OUR L-SERIES HOLEFORMS ARE DESIGNED AND MANUFACTURED TO FORM THE CRITICAL EQUAL TO CORED DIAMETER HOLE MEASURED "IN" FROM THE INNER WALL OF THE STRUCTURE.

<b>48 X 5 5" WALL MANHOLE</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 1 1/2" INTO HOLE
<b>6" FLATWALL</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 2 1/2" INTO HOLE
<b>60 X 6 6" WALL MANHOLE</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 2 1/2" INTO HOLE
<b>72 X 7 7" WALL MANHOLE</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 3 1/2" INTO HOLE
<b>84 X 8 8" WALL MANHOLE</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 4 1/2" INTO HOLE
<b>8" FLATWALL</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 4 1/2" INTO HOLE
<b>96 X 9 9" WALL MANHOLE</b>	CENTER OF CONNECTOR'S BAND SHOULD BE PLACED 5 1/2" INTO HOLE



# PARALLEL HOLE FORMERS

2° wall taper to accommodate the installation of flexible rubber manhole connectors

DIAMETER	MANHOLE	SPACING	PART #
7"	48 X 5	18"	7L485P
7"	60 X 6	20"	7L606P
7"	72 X 7	26.25"	7L727P
8"	48 X 5	18"	8L485P
8"	60 X 6	20"	8L606P
8"	72 X 7	26.25"	8L727P
8"	84 X 8	26.25"	8L848P
8"	84 X 8 3/4	26.25"	8L848 3/4P
8"	96 X 9	26.25"	8L969P
8"	96 X 9 3/4	26.25"	8L969 3/4P
8"	120 X 10	26.25"	8L12010P
8"	120 X 10 3/4	26.25"	L12010 3/4P
8"	144 X 13	26.25"	8L14413P
8"	144 X 13 3/4	26.25"	8L14413 3/4P
12"	60 X 6	26.25"	12L606P
12"	72 X 7	26.25"	12L727P
12"	84 X 8	26.25"	12L848P
12"	84 X 8 3/4	26.25"	12L848 3/4P
12"	96 X 9	26.25"	12L969P
12"	96 X 9 3/4	26.25"	12L969 3/4P
12"	120 X 10	26.25"	12L12010P
12"	120 X 10 3/4	26.25"	12L12010 3/4P
12"	144 X 13	26.25"	12L14413P
12"	144 X 13 3/4	26.25"	12L14413 3/4P
16"	72 X 7	26.25"	16L727P
16"	84 X 8	26.25"	16L848P
16"	96 X 9	26.25"	16L969P



# STRAIGHT L-SERIES HOLE FORMERS

2° wall taper to accommodate the installation of flexible rubber manhole connectors

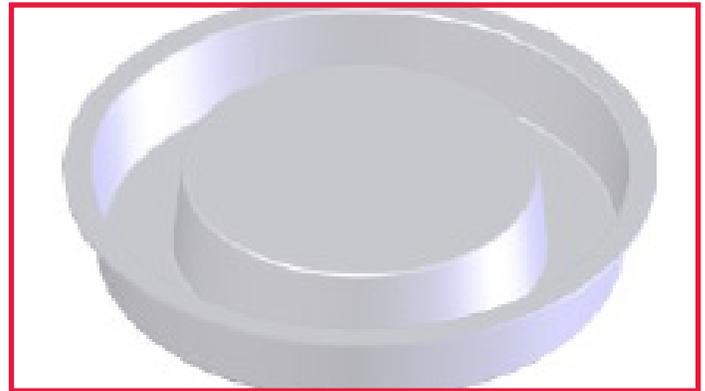
DIAMETER	MANHOLE	PART #
8"	84 X 8	8L848
8"	84 X 8 8 3/4	8L848 3/4
12"	84 X 8	12L848
12"	84 X 8 8 3/4	12L848 3/4
8"	96 X 9	8L969
8"	96 X 9 9 3/4	8L969 3/4
12"	96 X 9	12L969
12"	96 X 9 9 3/4	12L969 3/4
8"	120 X 11	8L12011
8"	120 X 11 3/4	8L12011 3/4
12"	120 X 11	12L12011
12"	120 X 11 3/4	12L12011 3/4
8"	144 X 13	8L14413
8"	144 X 13 3/4	8L14413 3/4
12"	144 X 13	12L14413
12"	144 X 13 3/4	12L14413 3/4

# ROUND FIBERGLASS GRADE RING FORMS

ROUND STANDARD ONE-PIECE FORM*				
ID	DEPTH	WALL	OD	PART #
24"	2"	5"	34"	2425
24"	3"	5"	34"	2435
24"	4"	5"	34"	2445
24"	6"	5"	34"	2465
24"	2"	6"	36"	2426
24"	3"	6"	36"	2436
24"	4"	6"	36"	2446
24"	6"	6"	36"	2466
24"	2"	8"	40"	2428
24"	3"	8"	40"	2438
24"	4"	8"	40"	2448
24"	6"	8"	40"	2468
24"	8"	8"	40"	2488
24"	6"	3"	30"	2463
24"	6"	4"	32"	2464
24"	4"	3"	30"	2443
26"	4"	5"	36"	2645
26"	6"	5"	36"	2665
27"	2"	5"	37"	2725
27"	3"	5"	37"	2735
27"	4"	5"	37"	2745
27"	6"	5"	37"	2765
30"	2"	6"	42"	3026
30"	3"	6"	42"	3036
30"	4"	6"	42"	3046
30"	6"	6"	42"	3066
30"	9"	6"	42"	3096
30"	2"	8"	46"	3028
30"	4"	8"	46"	3048
30"	6"	8"	46"	3068
30"	8"	8"	46"	3088
32"	2"	5"	42"	Call
36"	2"	6"	48"	3626
36"	3"	6"	48"	3636
36"	6"	6"	48"	3666
36"	9"	6"	48"	3696

## FAST - ONE PIECE 4 STEP PROCESS

1. Haul them out
2. Lay them flat
3. Form release
4. Pour



## NO MISTAKE SET UP

GREAT FOR USING UP EXCESS  
CONCRETE AT THE END OF YOUR  
PRIMARY STRUCTURE PRODUCTION  
POUR.

AFTER CURE SIMPLY FLIP THE FORMS  
OVER TO STRIP.

RIGID 5/16" FIBERGLASS CONSTRUCTION,  
YET RELATIVELY LIGHT IN WEIGHT.

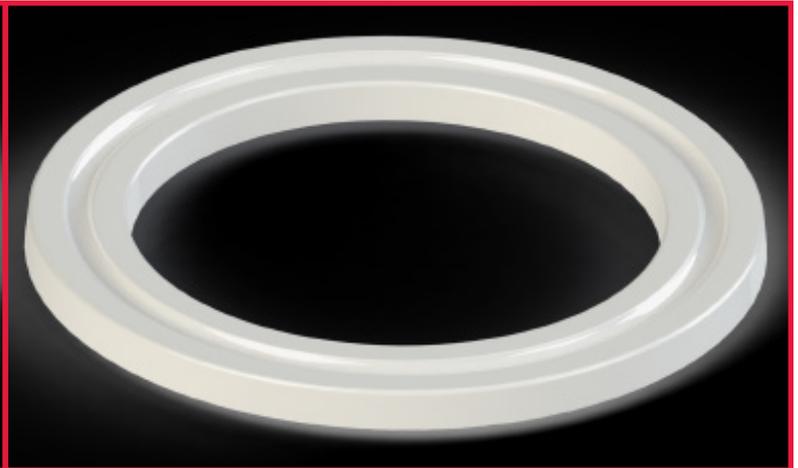
FORMS WON'T BEND, FLEX OR DISTORT  
ON AN UNEVEN SURFACE CREATING A  
WARPED GRADE RING.

IT'S NOT UNCOMMON FOR CUSTOMERS  
TO REPORT 5-7 YEARS OR MORE OF USE.

\* We can create a custom sized mold that is not currently listed in this table.

# WESTERN CANADIAN FIBERGLASS GRADE RING FORMS

ROUND STANDARD ONE-PIECE FORM				
ID	WALL	OD	DEPTH	PART #
635 MM	127 MM	889 MM	50MM	2525
25"	5"	35"	2"	
635 MM	127 MM	889 MM	75MM	2535 with Hand Hold Recess
25"	5"	35"	3"	
525 MM	182 MM	889 MM	50 MM	2127
21"	7"	35"	2"	



# GRADE RINGS

## THAT WILL ACCEPT A BUTYL RUBBER SEAL



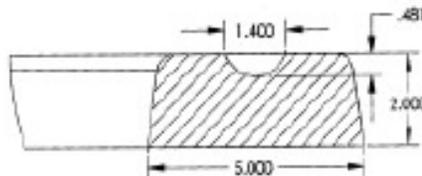
Other standard size grade rings available  
(Do not include butyl recess)

AVAILABLE IN SIZES OF:				
ID	WALL	OD	DEPTH	FORM WGT
24"	5"	34"	2"	28"
24"	5"	34"	3"	30"
24"	5"	34"	4"	34"
24"	5"	34"	6"	39"

### ALL OF OUR GRADE RING FORMS FEATURE

- ONE PIECE CONSTRUCTION
- RIGID 5/16" FIBERGLASS LAMINATE
- SMOOTH CONCRETE RESISTANT SURFACE COATING

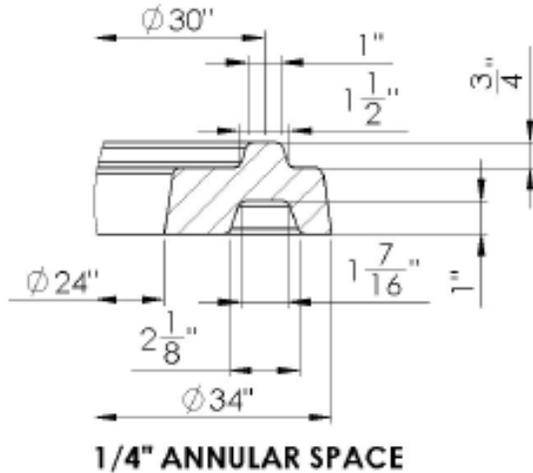
Designed to receive standard  
1" X 1" Butyl Rubber Sealant



# TONGUE AND GROOVE GRADE RING FORMS

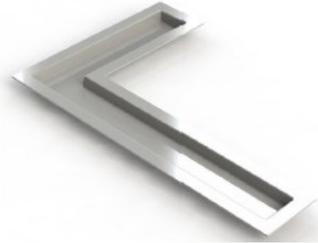
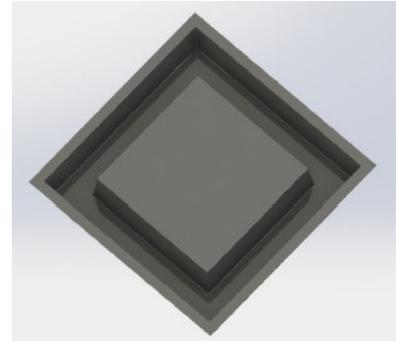
- Simple 2 piece design.
- Adapter plate for formed groove in cone available.
- 2", 3", 4", 6" are fully interchangeable and compatible to each other.
- It is recommended that these forms be poured on a vibrating table to prevent bug holes under form to plate.

PART	PART NO.
24 X 2 X 5	2425T
24 X 3 X 5	2435T
24 X 4 X 5	2445T
24 X 6 X 5	2465T



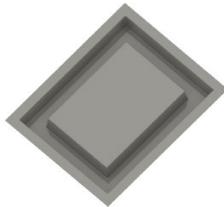
# OTHER FIBERGLASS GRADE RING FORMS

SQUARE STAND ONE PIECE FORM				
INSIDE WIDTH	WALL	OUTSIDE WIDTH	DEPTH	PART #
24.5"	6"	35.5"	2"	2426SQ
24"	6"	36"	4"	2446SQ
24"	6"	36"	6"	2466SQ
28"	7"	42"	6"	2867SQ
28"	6 5/8"	41 5/8"	4"	3846.625



RECTANGULAR L-SHAPED FORM				
WIDTH	LENGTH	WALL	DEPTH	PART #
24"	36"	6"	2"	24366 2RL
24"	36"	6"	3"	24366 3RL
24"	36"	6"	4"	24366 4RL

SLOPED TOP VALVE RING FORM		
ID	OD	PART #
8 1/2"	24"	248.5VRF
9 1/8"	24"	249.1255VRF



RECTANGULAR STAND ONE PIECE FORM				
WIDTH	LENGTH	WALL	DEPTH	PART #
24"	34"	6"	6"	243466R

# STAND PREMIUM PIPE SHAPING RINGS

Over 40 years and not a single reported or documented case of our rings being responsible for an “out of round” spigot.

## FIBERGLASS INSIDE PIPE SHAPING RINGS

- Corrosion resistant white gel coat contact surface.
- Round 10”-72” diameters for Packerhead and Drycast equipment
- Elliptical
- Special designs available to cure slumping issues in the production of manhole cones.
- Individual drawings available upon request.



## FIBERGLASS OUTSIDE PIPE SHAPING RINGS

- Corrosion resistant white gel coat contact surface
- Very close tolerance/ all produced from first generation precision machined steel molds.
- Many stock common industry joint designs for manhole production.
- For pipe, please forward your header casting machining drawing for stock verification and quotation.
- Our outside rings are commonly customized to meet unique requirements of your equipment and process.



# ECONOFORMS

## THE LOWEST COST HOLE FORM AVAILABLE

- A low cost alternative to our standard construction/ quality fiberglass hole forms.
- For your most cost sensitive applications.
- Ideal for sizes with limited planned production quantity.
- Added benefit/ our EconoForms are 1/2 the weight of our standard hole forms for your personnel to handle. Making them the lowest weight hole form available to the industry today.

### EconoForm High Taper Holes For Mortar Joints

- Our Standard Hole Forms have a polyester Gel Coat surface backed up with a 5/16" fiberglass laminate.
- Econoforms do not have a Polyester Gel Coat surface and are molded with a 3/16" fiberglass laminate.
- Customers are reporting 3-5 years of use.



### EconoForm Low Taper Holes That Will Receive a Field Installed Flexible Rubber Connector

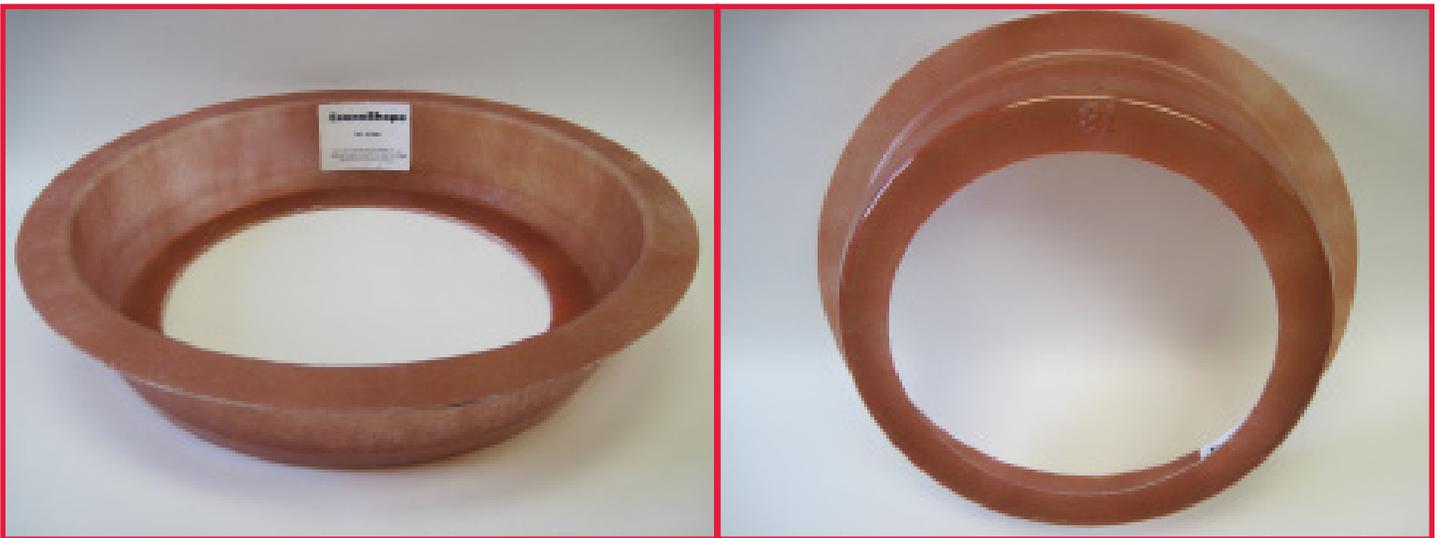
- Our L Series Hole Forms have a polyester Gel Coat Surface backed up with a 3/8" fiberglass laminate. Hole diameters 20" and greater have structural face supports/ ribs.
- EconoForm for low taper holes do not have a Polyester Gel Coat surface, a 1/4" fiberglass laminate and no additional structural support of the face.
- Producers also report they ironically strip easier than our stand hole forms.
- We have yet to find a dissatisfied customer using Econoforms. All producers report they are highly satisfied with the product.

# **ECONOSHAPE**

## **FIBERGLASS INSIDE PIPE SHAPING RINGS**

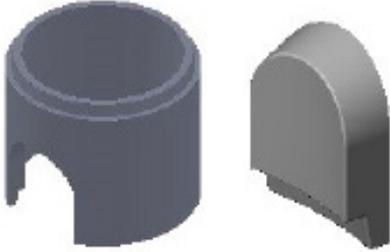
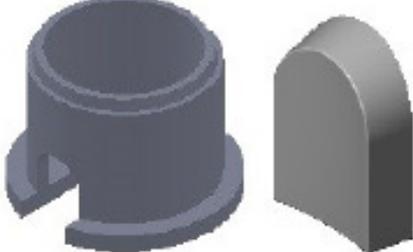
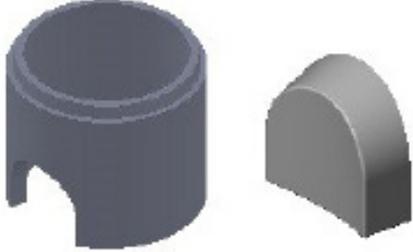
**QUITE POSSIBLY THE LOWEST COST PIPE SHAPING RINGS EVER OFFERED TO THE INDUSTRY!**

**THE LIGHTEST IN WEIGHT AND MOST ECONOMICAL INSIDE PIPE SHAPING RING WE HAVE EVER OFFERED!**



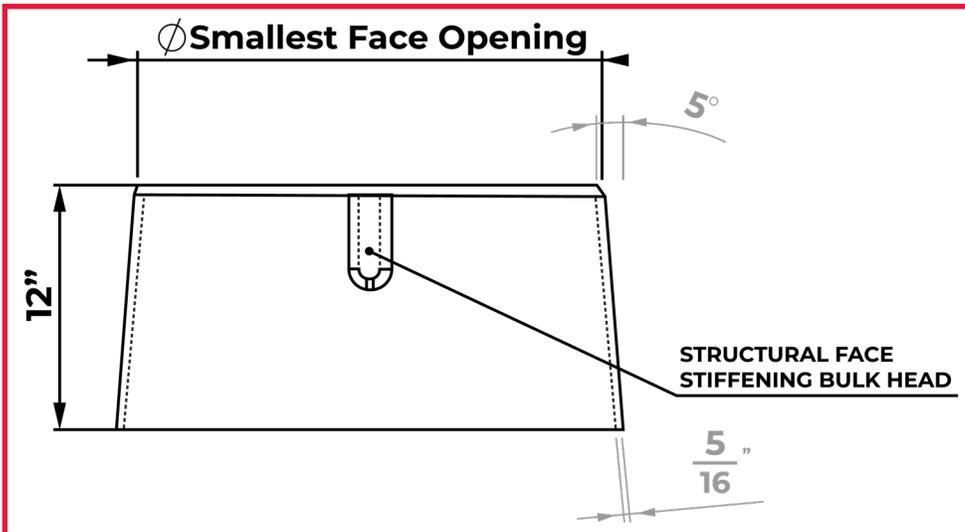
**About 1/3 the weight of our standard premium inside pipe shaping ring. Significantly less expensive than our stand premium pipe shaping ring.**

# DOGHOUSE HOLE FORMERS

		
<p>If you plan to produce in a riser form and want to block out the joint as well.</p>	<p>Molded full height/ if you plan on producing in a base form with a 6" floor. 6" of doghouse height allows for floor.</p>	<p>Molded less than full height if you plan on producing in a base form with no floor/ no joint on bottom. Specify requested height.</p>

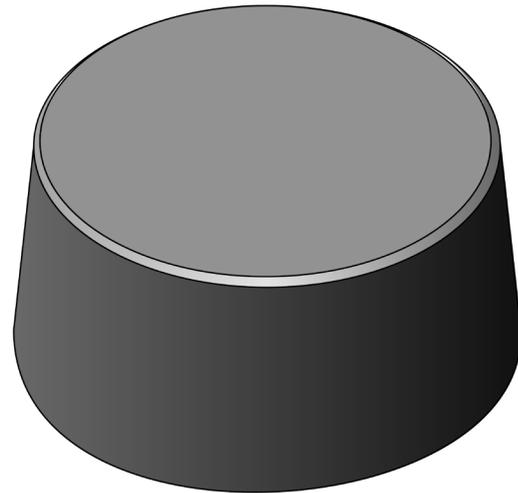
SPECIFICATIONS				
TYPE (MANHOLE)	DIAMETER	HEIGHT	WALL	STOCK NO.
48" ID	8"	14"	5"	814485
	12"	18"	5"	1218485
	15"	22"	5"	1522485
	18"	27"	5"	1827485
	24"	30"	5"	2430485
	28"	34"	5"	2834485
60" ID	12"	18"	6"	1218606
	14"	20"	6"	1420606
	18"	24"	6"	1824606
	24"	30"	6"	2430606
72" ID	18"	24"	7"	1824727
	24"	30"	7"	2430727

# TOP SLAB HOLE FORMS



Offered specifically to form an opening in Top Slabs with a lesser wall taper than our Standard Hole Forms for box walls. Their 5° wall taper will net only 2 1/8" diameter growth from face to largest opening on 12" slab thickness.

Top Slab Hole Forms are manufactured with a stiffening bulkhead across the face diameter to improve ease of stripping and lasting durability



## Currently offered in the following face diameters

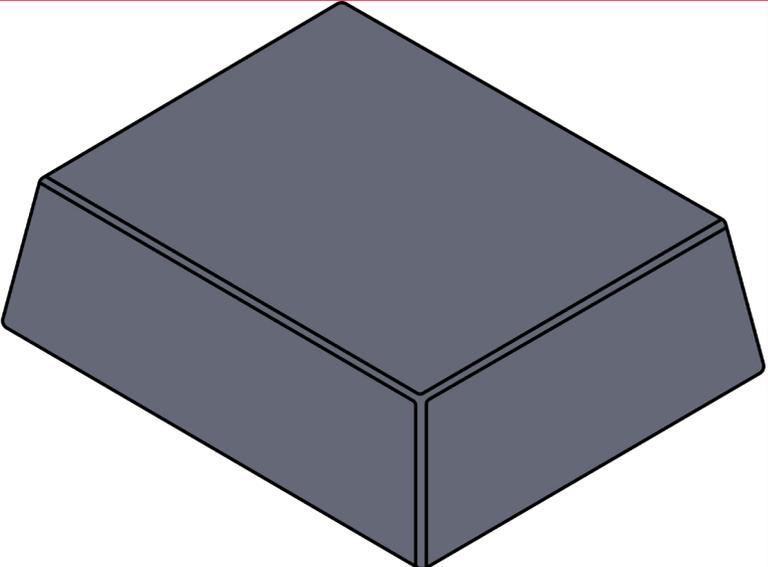
24" face diameter	Available in 8" to 12" slab thickness
26" face diameter	Available in 8" to 12" slab thickness
30" face diameter	Available in 8" to 12" slab thickness

## Square Top Slab Openings

We also frequently manufacture regionally unique dimensionally, square and rectangular Top Slab Hole Forms. Call for dimensional availability.

# RECTANGULAR/ SQUARE TOP SLAB HOLE FORMS

Currently available in any  
wall thickness 6" to 12"

Face/ smallest dimension	
24 x 24	
24 x 30	
24 x 34	
24 x 36	
28 x 28	
28 x 34	
28 x 36	
30 x 30	

**8 degree sidewall \*A 12" wall will gain 2"  
in width & length**

# HOLE FORMS FOR USE WITH PANEL FORMS AND WALL TIES



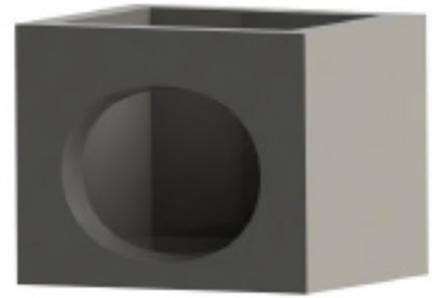
**It is becoming increasingly more popular for producers to use panel forms to produce boxes. The solid face of a standard fiberglass hole form interferes with panel form's required wall ties.**

Typically, customers order these with only the face removed; 4" inset from face radius to allow for use of panel form ties (picture on the right). We wanted to depict on the catalog picture all customization that is possible. The left picture with the flat spot in the center opening would be for a producer pouring monolithically with a poured base and this prevents filling the Hole Form's back cavity with concrete. The magnet holes would be for a producer wanting to use these Hole Forms in fabricated steel box forms as well as in panel form production. In some cases, they could include slide bars as well. Because the faces are removed, it makes the Hole Form weight on average 25-50% lighter in weight (depending on diameter).

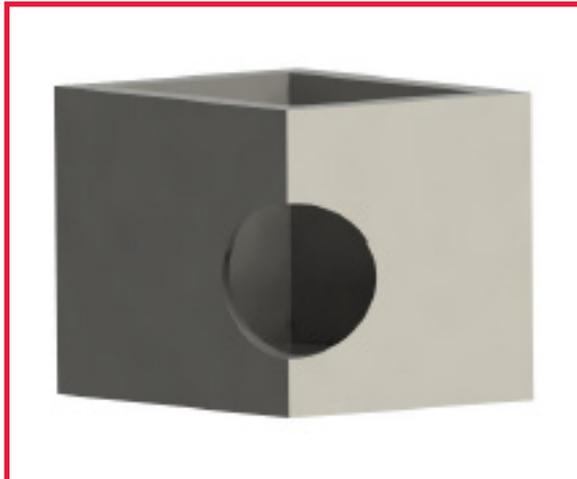
**We can customize for your needs.**

## ELLIPTICAL HOLE FORMS 6" STRAIGHT WALL

HOLE DIAMETER	PART NO.
24 X 33 X 6	24336E
28.5 X 39.5 X 8	2853958E
30 X 41 X 6	30416E
34.5 X 48.5 X 6	3454856



## CORNER HOLE FORMS



HOLE DIAMETER	PART NO.
16 X 6	166C
18 X 6	186C
21 X 6	216C
24 X 6	246C
27 X 6	276C
30 X 6	306C
33 X 6	336C
24 X 8	248C
27 X 8	278C

## ARCH HOLE FORMS 6" STRAIGHT WALL

HOLE DIAMETER	PART NO.
18 X 24 X 6	18246A
21 X 27 X 6	21276A
23 X 31 X 6	23316A
27 X 38 X 6	27386A
34 X 48 X 6	34486A
39 X 56 X 6	39566A



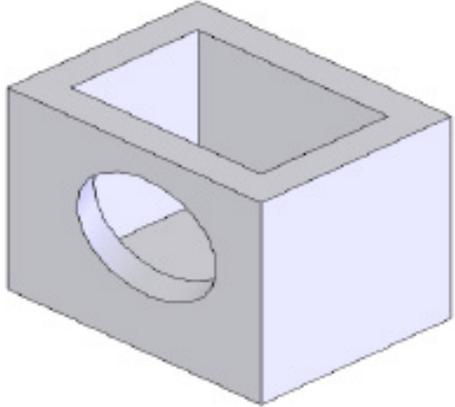
## OVAL HOLE FORMS

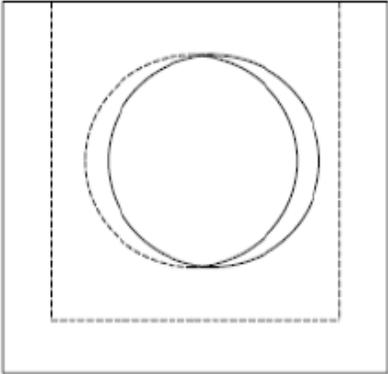


HOLE DIAMETER	PART NO.
18 X 28 X 6	18286
21 X 30 X 6	21306
24 X 35 X 6	24356
26 X 40 X 6	26406
32 X 41 X 6	32416
34 X 40 X 6	34406
21 X 30 X 8	21308
24 X 35 X 8	24358
26 X 40 X 8	26408

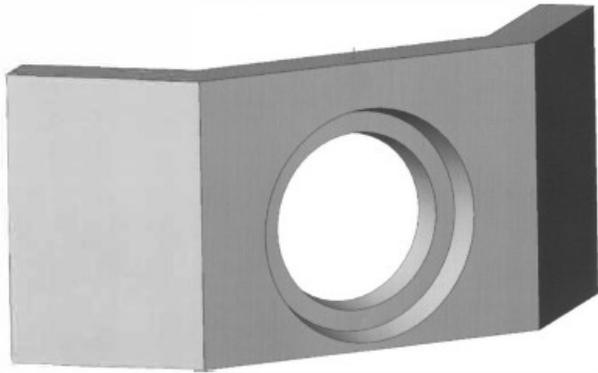
**6" Straight Wall | 8" Straight Wall | 40° Angled Entry**

# ANGLED ENTRY FORMS

<b>18" X 6" 25° Angled Entry</b>	
<b>21" X 6" 25° Angled Entry</b>	
<b>24" X 6" 25° Angled Entry</b>	
<b>26" X 6" 25° Angled Entry</b>	
<b>30" X 6" 25° Angled Entry</b>	

	<b>18" X 6" 15° Angled Entry</b>
	<b>20" X 6" 15° Angled Entry</b>
	<b>24" X 6" 15° Angled Entry</b>
	<b>27" X 6" 15° Angled Entry</b>
	<b>30" X 6" 15° Angled Entry</b>

# STEPPED HOLE FORMS

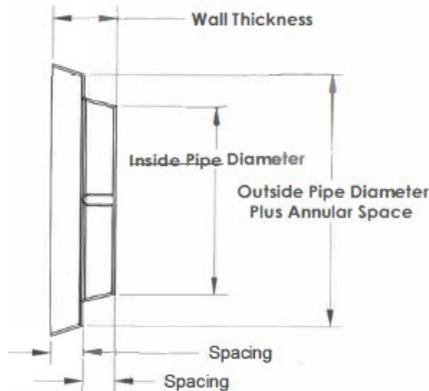


## FOR HEADWALLS AND WINGWALLS

This design of hole form gains in popularity each year as the concept is adopted regionally in precast headwalls. The principal benefit is that no mortar joint can be viewed after installation on the face of the headwall.

To date we have produced these forms as custom fabricated configurations. As identified standards have emerged we have begun to create dedicated tooling for their production yielding reductions in manufacturing costs.

We will continue to offer non standard configurations and modifications to meet your unique applications. Listed below are our new standard sizes.



## BASIS OF DESIGN: B WALL RCP APPLICATION

PART NO.	PIPE ID APPLICATION	HOLE FORM SMALL FACE DIAMETER	SPACING	OFFSET FACE DIAMETER	PRECAST WALL THICKNESS
AW12-6	12"	12"	3"	18"	6"
AW12-8	12"	12"	4"	18"	8"
AW15-6	15"	15"	3"	22"	6"
AW15-8	15"	15"	4"	22"	8"
BW18-6	18"	18"	3"	26"	6"
BW18-8	18"	18"	4"	26"	8"
BW24-6	24"	24"	3"	32"	6"
BW24-8	24"	24"	4"	32"	8"
CW30-8	30"	30"	4"	40"	8"
CW36-8	36"	36"	4"	48"	8"

# HOLE FORMS MOLDED IN SEGMENTS

Ever need to form part of a hole in the base and part in the riser? Here is your answer. When the job is complete, bolt the hole form back together and use as a standard round.



Using the same fabrication methodology, literally any custom doghouse configuration is possible. We can also mold any hole form with a flat on the top, bottom or both to make the hole flush with the floor, achieve a minimum cover specification or accommodate a large diameter hole within your form/ structure height.

# HOLE FORM OPTIONS

## 1/2" COIL THREAD INSERTS

Attachment insert comes complete with bolt and handle nut for attachment to the form.

## ADJUSTABLE SLIDE BAR

Allows easy adjustment of hole form location with only one hole in the form.

## MAGNETIC ATTACHMENT

We can modify our forms to accommodate the use of any magnet you are using. We offer several attachment magnets. Please call for details.

## END FLATTENED

If the job requires the hole to be at the very bottom of the structure and the wall taper of the form prohibits it.

## HOLES MOLDED IN HALVES OR SEGMENTS

### **Manholes:**

To produce an oval hole.  
To split the hole between the base and riser.

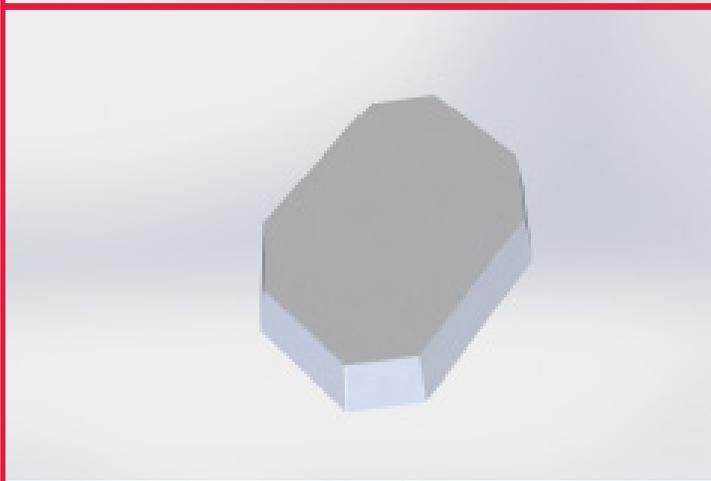
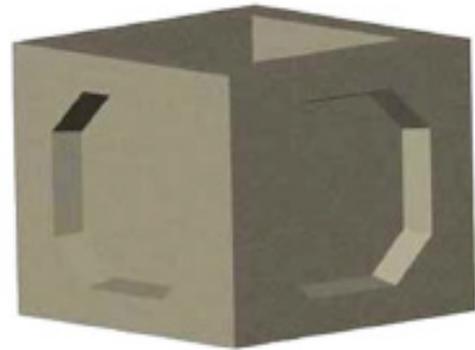
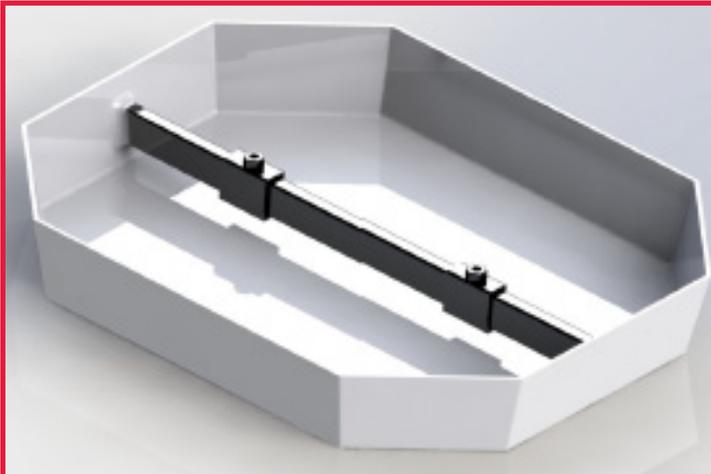
### **Boxes:**

To produce an oval hole.  
To place the hole just off the corner

## ADDITIONAL OPTIONS

- Support bars
- Custom modifications to meet the production needs of your plant

# OCTAGONAL KNOCKOUTS



## VOID DIMENSIONS

22 X 26 X 5

24 X 24 X 4

32 X 26 X 5

32 X 32 X 5

44 X 40 X 4

**ALL FORMS INCLUDE (2) POINT ATTACHMENT  
ADJUSTABLE SIDE BAR. ALL FORMS HAVE 1" TAPER.**

# NEOPRENE RUBBER EDGE SEAL

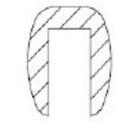
Simply slips over the back fiberglass laminate edge of hole form or knock out. Designed for OUR fiberglass laminate thickness of 5/16" - 3/8" (easily slips off anything thinner).

Simply slips on without the need of adhesive.

Supplied standard on our knock outs (void/partial hole with cover) to ensure seal between back laminate edge and form jacket.

Many SCC producers have added to their hole forms to prevent leakage. Will offer a little more life to a hole form that is leaking due to back edge wear/damage.

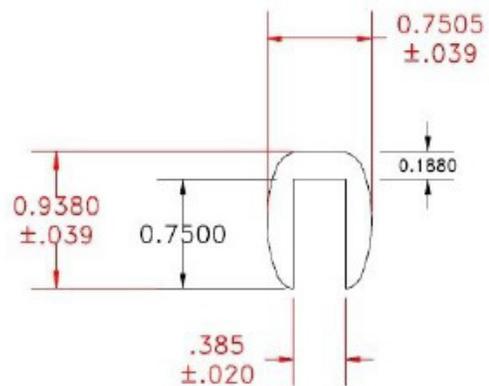
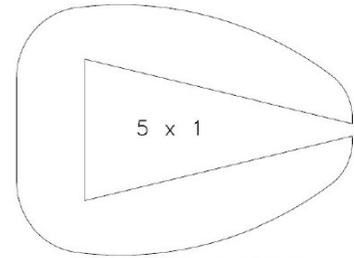
Commonly used on our hole forms produced for tapered core forms.



Full Scale

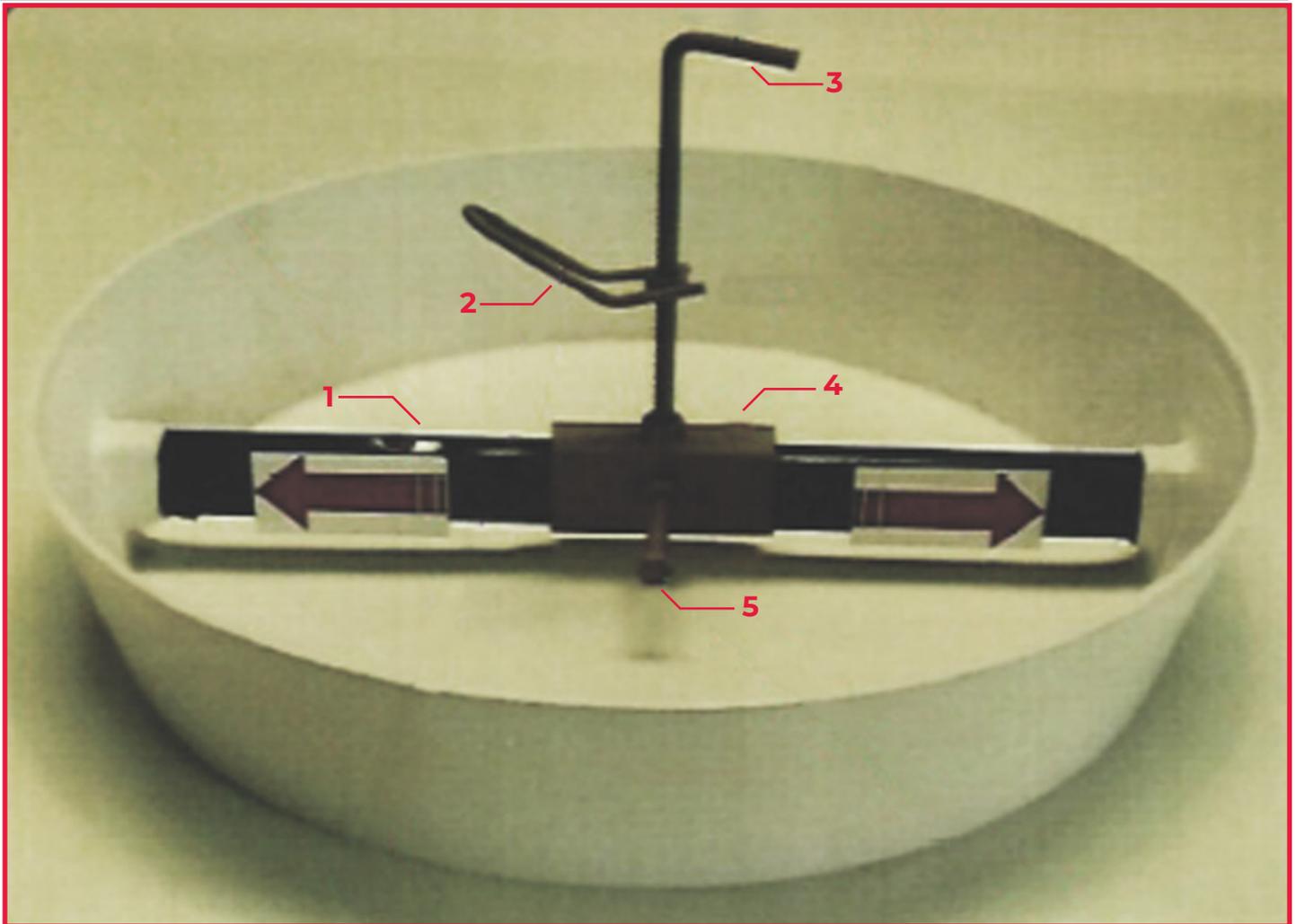


Part to be extruded with channel closed.  
Full Scale



# ADJUSTABLE SLIDE BAR

1	Bar serves as a handle. Our performance records indicate hole forms with bars outlast those without. Apparently production personnel are more inclined to grab the bar and give it a yank to extract rather than striking the face. Bar construction 1"x2" 11GA reactangular steel tubing <ul style="list-style-type: none"><li>· Round wall forms are limited vertical adjustment only</li><li>· Straight wall applications can be adjusted in any angle</li></ul>
2	Handle nut tightens down on outer form jacket and pulls holes form up tight against inner form.
3	J bolt passes through 1/2" hole in "outer" form jacket and tightens against bar to "lock" hole form location.
4	Slide mechanism remains stationary when bolten to form. Hole form moves along axis of bar for adjustment prior to locking in place.
5	Slide mechanism lock allows repetition of a special hole location.



## MAXIMUM HOLE FORM LOCATION TRAVEL

7" - 16" face diameter    Minus 5"

18" & greater diameter    Minus 7"

# COIL THREAD ATTACHMENT

## STANDARD COIL THREAD INSERT ATTACHMENT OPTION

- Repeatable single location attachment to the jacket.
- 1/2" coil thread thin slab insert laminated into hole form face.
- Option includes J-bolt and handle nut.



# 500 LBS. HOLDING STRENGTH MAGNETIC ATTACHMENT

- Any existing fiberglass hole form can be easily modified for use simply by drilling the form face with a standard hardware store variety 2 1/4" hole saw.
- For starters, we recommend (1) of these magnets for hole form diameters 4"-18", (3) magnets for 19"-36" and (5) magnets for 38" and greater. Conditions differ from plant to plant so watch closely for any movement in the first few pours. If any movement is noted, drill additional 2 1/4" diameter holes and add magnets accordingly.
- Holding strength of magnets are generally measured on a 1" steel plate. Sufficient holding strength can be achieved with standard industry steel form wall thickness' of 1/4". Use caution when using magnetic attachment on modular steel "panel forms". The thin steel walls (some as little as 1/16") can significantly reduce the magnets holding strength resulting in slippage during pour.
- Magnets attract any metal. Watch for magnet face contamination that may lead to loss of holding strength.

**CANNOT BE USED FOR TAPERED CORE FORMS OR A THIN WALL KNOCKOUT.**

