TTAB

DILLIS V. ALLEN
ATTORNEY AT LAW
105 S. Roselle Road, Suite 101
Schaumburg, Illinois 60193

(847) 895-9100

May 5, 2010

VIA FEDERAL EXPRESS

Mr. George C. Pologeorgis
Interlocutory Attorney
U. S. Patent and Trademark Office
Trademark Trial and Appeal Board
600 Dulany Street - Room 37A
Alexandria, VA 22314

RE: AS Holdings, Inc. v. H&C Milcor, Inc.
Mark: Miscellaneous Design
(Pipe Boot Product Design)
Opposition No. 91182064
Filed: 1-22-08

Dear Mr. Pologeorgis:

Pursuant to your request during our telephone conference on April 29, 2010, we are enclosing copies of Defendant's Exhibit Nos. 9, 12 and 14.

Very truly yours,

Dillis V. Allen

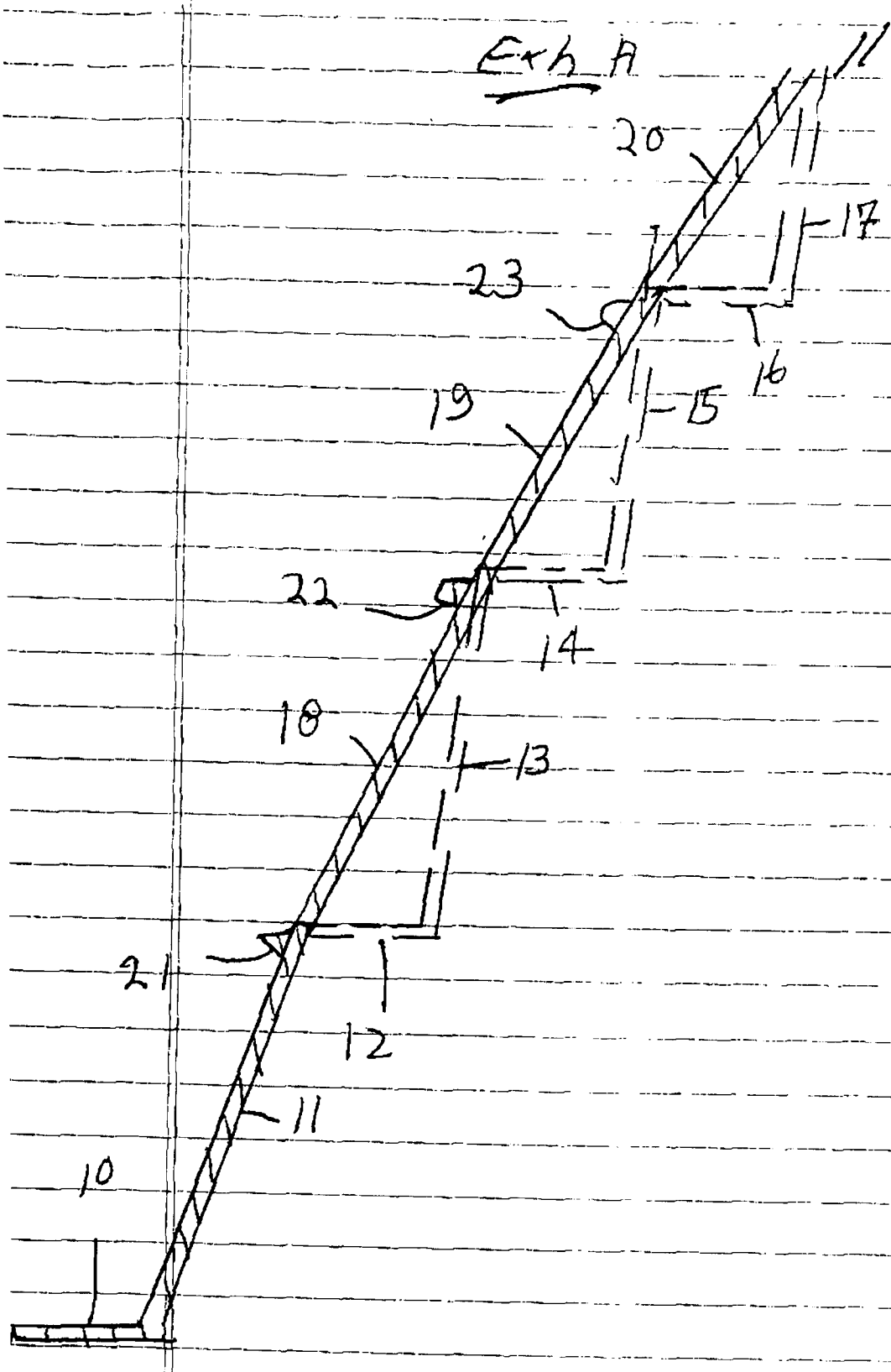
DVA/dkm
enclosures

cc: Terence J. Linn, Esq.
Van Dyke, Gardner, Linn & Burkhart

05-06-2010

AS HOLDINGS vs. H&C MILCOR
Opposition No. 91182064
Serial No. 76/461,157
Deft. No. 9

Exh A 11.12.08

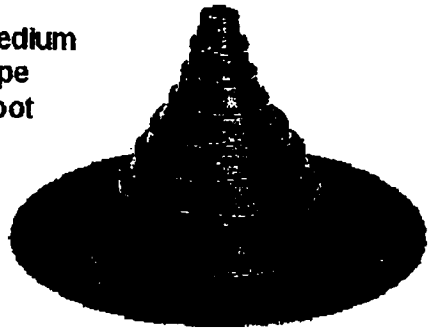


Pipe Flashings

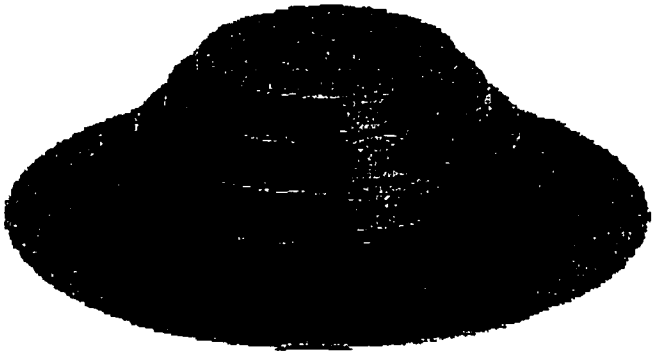
Technical Product Information

Flashings for all size penetrations for single ply roofs

Small Pipe Boot



Medium Pipe Boot



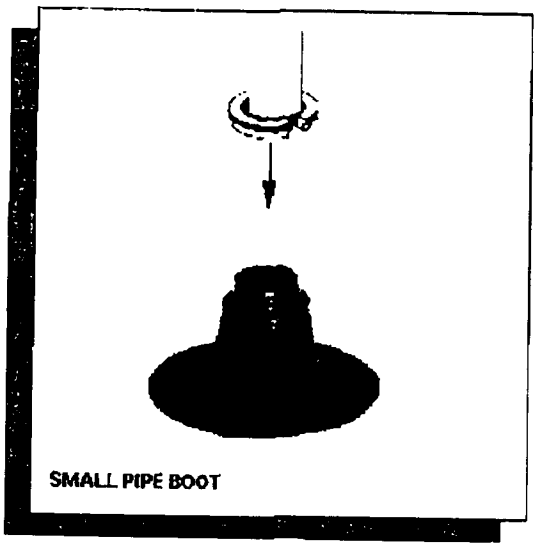
Large Pipe Boot

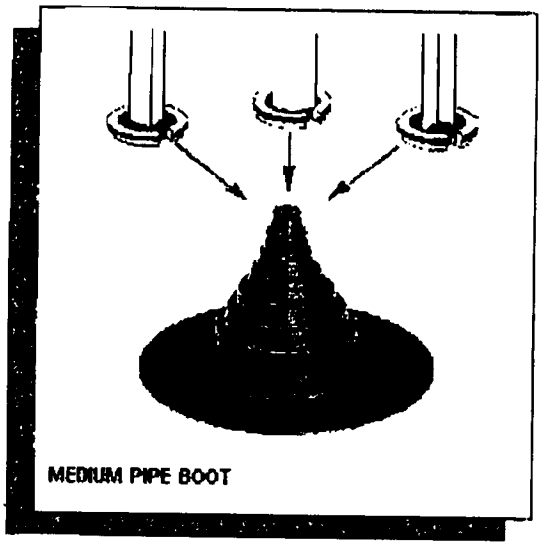
Quadraseal Pipe Boot

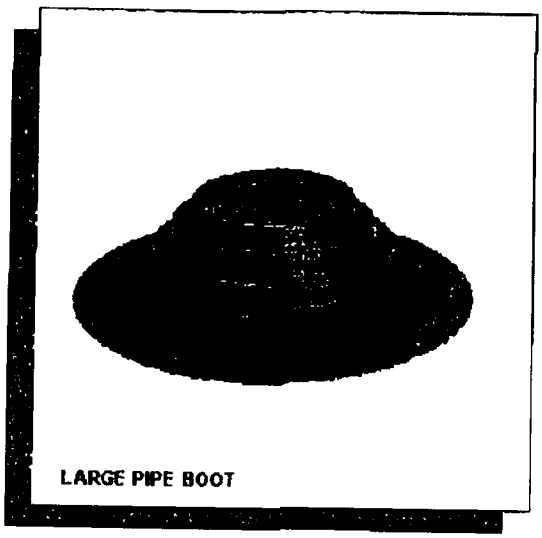
The "Pipe Boot" is an economical flashing designed for single pipe penetrations on single ply rubber roofs. The unit will accomodate virtually all pipe sizes: 1.75" and 2.75" on Small Pipe Boot, 1" through 6" on Medium Pipe Boot and 8" through 12" on Large Pipe Boot. Pipe Boots are available in EPDM, Neoprene, Hypalon, TPO, or PVC material. The Quadraseal is designed to allow as many as four pipes up to 2" in diameter to pass through one flashing. Quadraseals are available in EPDM material only. The conically shaped steps of the Portals Plus pipe flashing will securely seal all pipes and the large double thick molded rib at the top of each step offers supreme tear resistance and reinforcement, as well as a cutting guide. Utilizing the Pipe Flashings eliminates the workmanship error in field fabrication and makes flashing pipes a clean, consistent approach.

Adapters available for round, square tube, and angle iron available to fit most pipe boots.

AS HOLDINGS vs. H&C MILCOR
Opposition No. 91182064
Serial No. 76/461,157
Deft. No. 12


SMALL PIPE BOOT


MEDIUM PIPE BOOT


LARGE PIPE BOOT

QUADRASEAL 412R

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 19.05
42130	SMALL - WHITE EPDM	10	$ 20.40
44130	SMALL - WHITE HYPALON*	10	$ 21.75
42110	MEDIUM - BLACK EPDM	10	$ 24.95
42140	MEDIUM - WHITE EPDM	10	$ 30.10
43170	MEDIUM - BLACK NEOPRENE	10	$ 37.65
44170	MEDIUM - WHITE HYPALON*	10	$ 31.85
OEM	MEDIUM - WHITE TPO**	8	$ CF.00
OEM	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 88.45
42151	LARGE - WHITE EPDM	5	$ 90.75
43181	LARGE - WHITE NEOPRENE	5	$ 124.75

** - ALL COLORS AVAILABLE FOR TPO & PVC (call Portals Plus)
CF - DENOTES CALL FACTORY

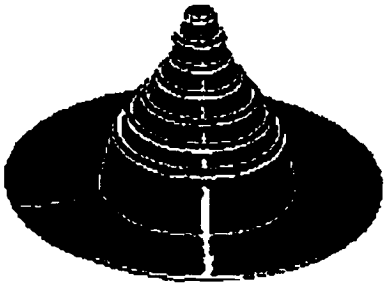
Quadraseals
Adapter Rings
Installation Instructions
CAD Page

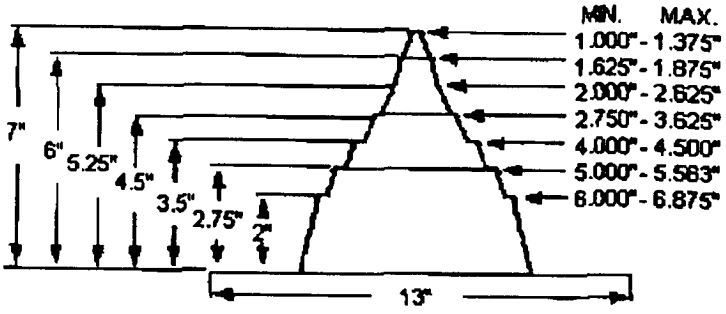
Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Pipe Flashin

Technical Product Inform

Medium Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Medium Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is less than 6" in diameter. The Medium Pipe Boot shall include 60 mil EPDM, NEOPRENE, or HYPALON compression molded body. The Medium Pipe Boot shall also include Portals Plus' Snaplock Clamp. Whenever necessary utilize Portals Plus Adapters to seal to square tubing and angle iron and for round penetrations less than 1" in diameter. Use white or black as necessary. Attachment of Medium Pipe Boot to roof system shall be done in accordance with Portals Plus Installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00

* - AVAILABLE ON A LIMITED BASIS

Quadraseals.
Adapter Rings.
Installation Instructions.
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

PORTALS PLUS 484 N. Thomas Drive, Bensenville, IL 60106 TEL: (630) 595-7320 FAX: (6

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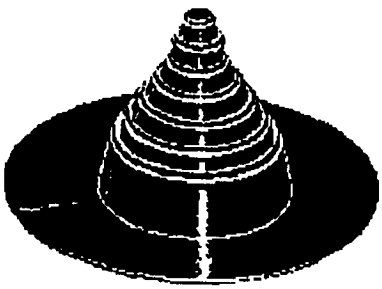
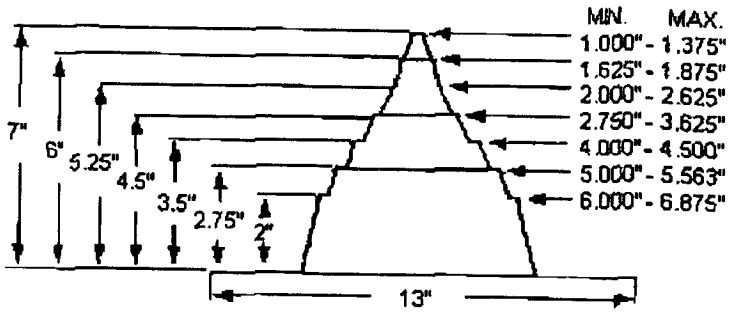
Pipe Flashin

Technical Product Infor

Medium Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Medium Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is less than 6" in diameter. The Medium Pipe Boot shall include 60 mil EPDM, NEOPRENE, or HYPALON compression molded body. The Medium Pipe Boot shall also include Portals Plus' Snaplock Clamp. Whenever necessary utilize Portals Plus Adapters to seal to square tubing and angle iron and for round penetrations less than 1" in diameter. Use white or black as necessary. Attachment of Medium Pipe Boot to roof system shall be done in accordance with Portals Plus Installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00

* - AVAILABLE ON A LIMITED BASIS

Quadraseals.
Adapter Rings.
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Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

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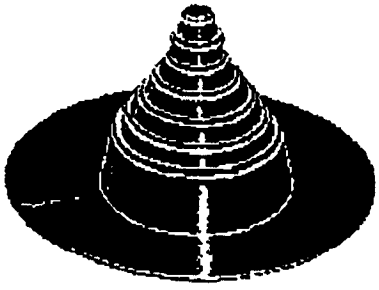
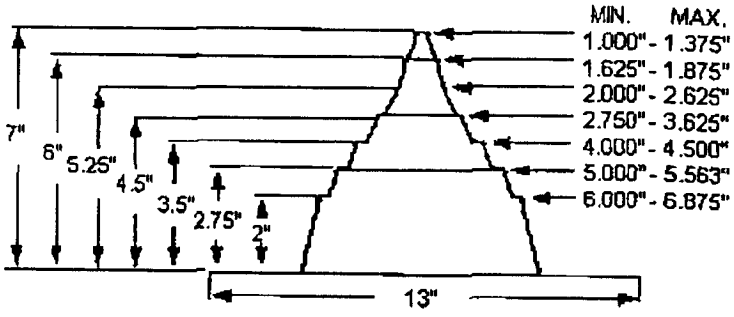
Pipe Flashin

Technical Product Inform

Medium Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Medium Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is less than 6" in diameter. The Medium Pipe Boot shall include 60 mil EPDM, NEOPRENE, or HYPALON compression molded body. The Medium Pipe Boot shall also include Portals Plus' Snaplock Clamp. Whenever necessary utilize Portals Plus Adapters to seal to square tubing and angle iron and for round penetrations less than 1" in diameter. Use white or black as necessary. Attachment of Medium Pipe Boot to roof system shall be done in accordance with Portals Plus Installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00

* - AVAILABLE ON A LIMITED BASIS

Quadraseals.
Adapter Rings.
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Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

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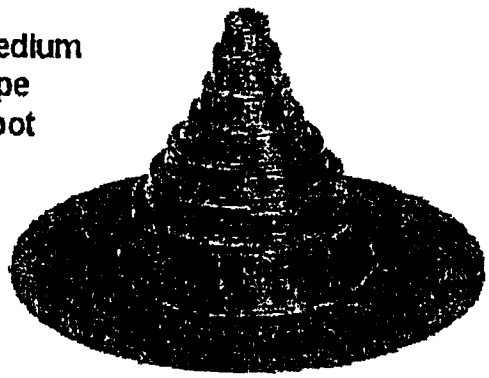
Pipe Flashin

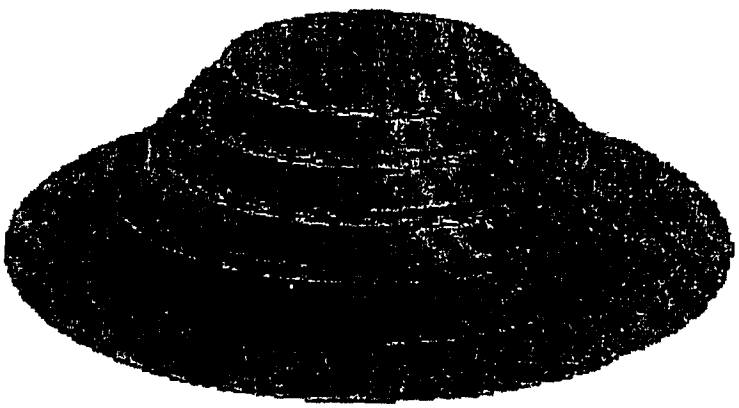
Technical Product Inform

Flashings for all size penetrations for single ply roofs

Small Pipe Boot

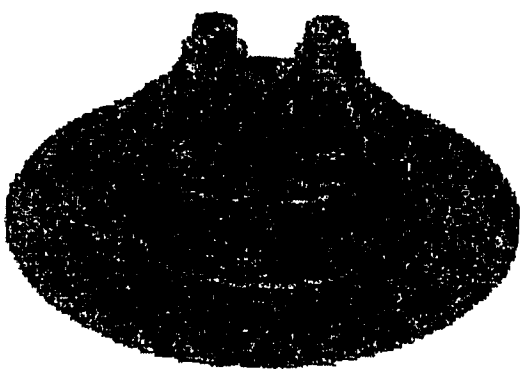
Medium Pipe Boot





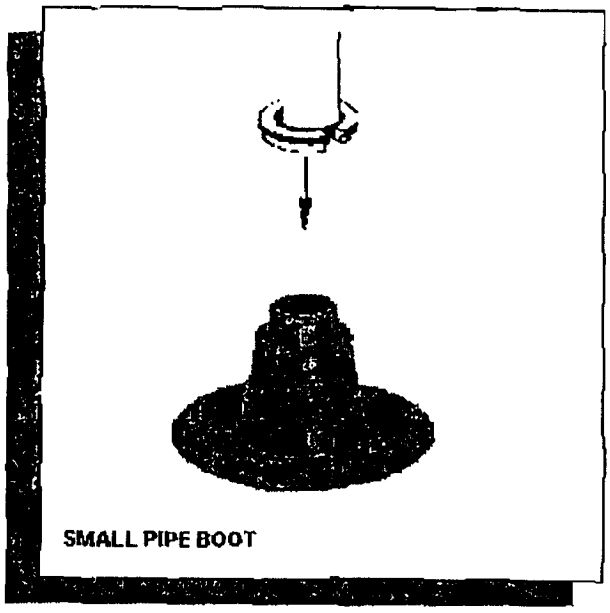
Large Pipe Boot

Quadraseal Pipe Boot

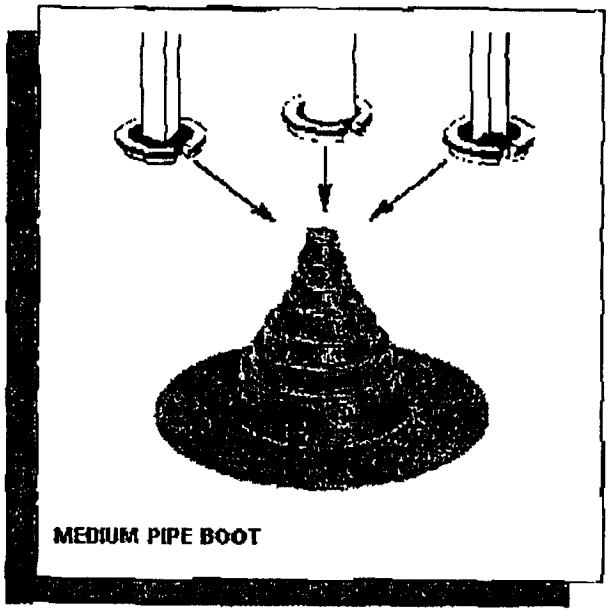


The "Pipe Boot" is an economical flashing designed for single pipe penetrations on single ply rubber roofs. The unit will accomodate virtually all pipe sizes: 1.75" and 2.75" on Small Pipe Boot, 1" through 6" on Medium Pipe Boot and 8" through 12" on Large Pipe Boot. Pipe Boots are available in EPDM, Neoprene, Hypalon, TPO, or PVC material. The Quadraseal is designed to allow as many as four pipes up to 2" in diameter to pass through one flashing. Quadraseals are available in EPDM material only. The conically shaped steps of the Portals Plus pipe flashing will securely seal all pipes and the large double thick molded rib at the top of each step offers supreme tear resistance and reinforcement, as well as a cutting guide. Utilizing the Pipe Flashings eliminates the workmanship error in field fabrication and makes flashing pipes a clean, consistent approach.

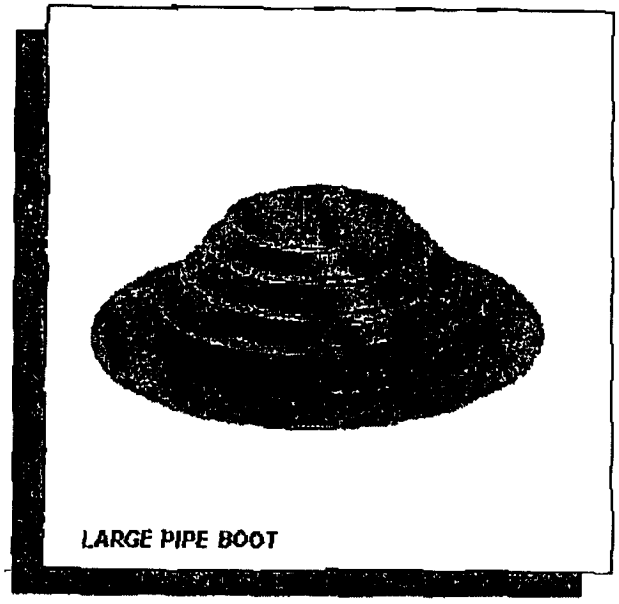
Adapters available for round, square tube, and angle iron available to fit most pipe boots.



SMALL PIPE BOOT



MEDIUM PIPE BOOT



LARGE PIPE BOOT

QUADRASEAL 412R

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 16.80
42130	SMALL - WHITE EPDM	10	$ 18.00
44130	SMALL - WHITE HYPALON*	10	$ 19.20
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00
OEM	MEDIUM - WHITE TPO**	8	$ CF.00
OEM	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 78.00
42151	LARGE - WHITE EPDM	5	$ 80.00
43181	LARGE - WHITE NEOPRENE	5	$ 110.00

** - ALL COLORS AVAILABLE FOR TPO & PVC (call Portals Plus)
CF - DENOTES CALL FACTORY

Quadraseals
Adapter Rings
Installation Instructions
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

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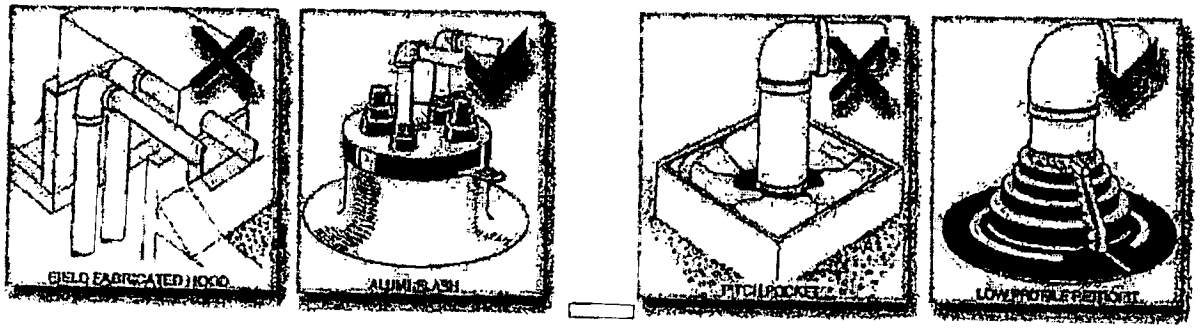
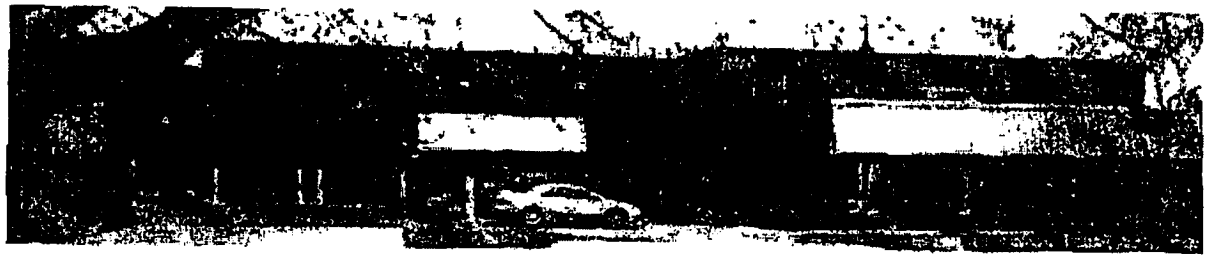
PLEASE GIVE US FEEDBACK

Portals Plus Website Survey

- Product Search
- Specification Wizard
- CAD Details
- Continuing Education
- Product Information
- Part Number Search
- Installation
- Warranty
- Contacts

Portals Plus manufactures solutions for roof leak problems. Roof leaks are the biggest problem of architects and building owners. 85% of all roof leaks occur at penetrations and corners due to poor details which fail to accommodate movement. Extreme roof temperature swings require durable and flexible flashings. However, high labor costs and low common denominator standards create conditions for poor workmanship and non-functional field fabricated flashings. A "good enough" attitude creates temporary expedients, such as pitch pockets or pans and their derivatives, but at the building owner's ongoing expense. The National Roofing Contractors Association (NRCA) states that "Pitch pockets or pans by their design, are not intended to be continuously watertight. Their use should not be encouraged since better methods are available to accomplish the same end. Pitch pans or pockets require frequent inspection and maintenance, and usually a great deal of damage can occur before the leak around a pitch pocket or pan is evident."





Portals Plus has been manufacturing its unique products since 1977 in state-of-the-art manufacturing facilities in the Chicago suburbs.

Portals Plus products are readily available across the USA and Canada through a network of *local stocking wholesale distributors*. Call 800-624-8642 or 630-595-7320 for the stocking distributor near you or for international availability.

Commercial Products Group 484 N. Thomas Drive, Bensenville, IL 60106
TEL: 630-595-7320 FAX: 630-766-6259
portalsplus@portalsplus.com

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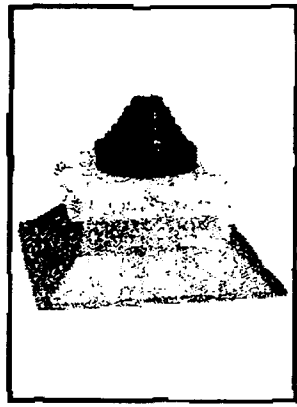
Product Selection

SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



PIPE PORTAL® (Cover, Black Cap & Clamps) RC-3A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
32005 32015 32025 32035	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 79.00
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	$ 126.00
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 80.00
32111	SMALL RC-3A CANTED CURB - 8" High	1	$ 83.00
32141	LARGE RC-3A CANTED CURB - 8" High	1	$ 159.00

See more information about the caps.

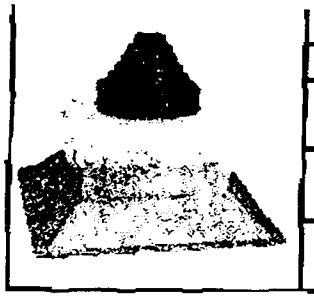
SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.

PIPE PORTAL® (Cover, Black Cap & Clamps) RC-4A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
32005 32015 32025	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes)	5	$ 79.00

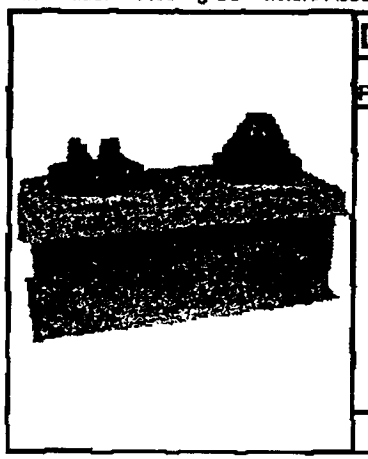
ALP00440



32035	w/ 481 BLACK CAP (4 - .375" to 1" pipes)		
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	$ 126.00
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 80.00
32121	SMALL RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 83.00
32151	LARGE RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 159.00

DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-2A

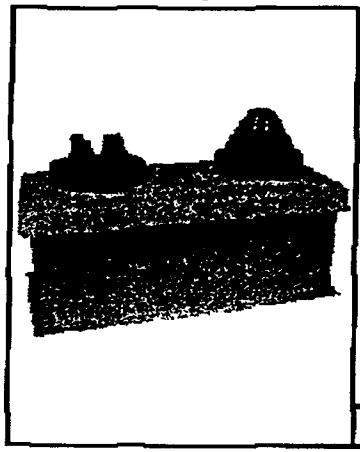
NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP	2	$ 239.00
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP		
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32161	DOUBLE RC-2A STRAIGHT SIDED CURB -11" High	1	$ 176.00

See more information about the caps.

ALP00441

DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-3A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP	2	$ 239.00
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP		
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32171	DOUBLE RC-3A CANTED CURB - 8" High	1	$ 176.00

See more information about the caps.

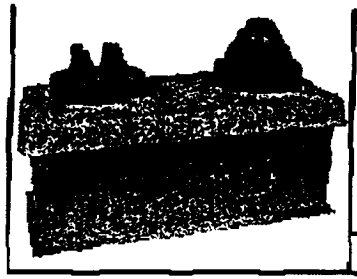
DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.

DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-4A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP		
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		

ALP00442



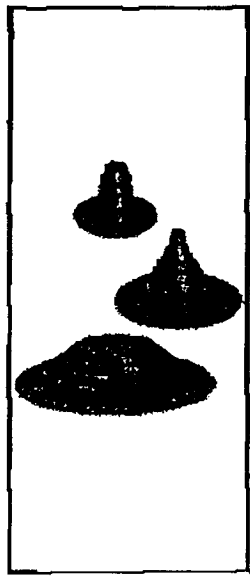
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP	2	$ 239.00
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32181	DOUBLE RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 176.00

See more information about the caps.

PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash



PIPE BOOTS (w/ CLAMPS)

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 16.80
42130	SMALL - WHITE EPDM	10	$ 18.00
44130	SMALL - WHITE HYPALON*	10	$ 19.20
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00
46209	MEDIUM - WHITE TPO**	8	$ CF.00
48009	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 78.00
42151	LARGE - WHITE EPDM	5	$ 80.00
43181	LARGE - BLACK NEOPRENE	5	$ 110.00
45000	QUADRASEAL 212R - BLACK EPDM	10	$ 32.00
45010	QUADRASEAL 412R - BLACK EPDM	10	$ 32.00
45020	QUADRASEAL 481R - BLACK EPDM	10	$ 32.00

* - AVAILABLE ON A LIMITED BASIS

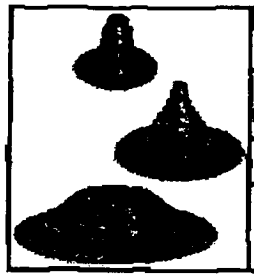
** - ALL COLORS AVAILABLE (call Portals Plus)

ALP00443

PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash

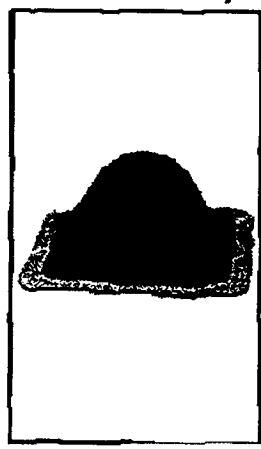


PIPE BOOTS (w/ ADHESIVE TAPE)

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42500	SMALL - BLACK EPDM	10	$ 22.60
42510	MEDIUM - BLACK EPDM	10	$ 32.60
43570	MEDIUM - BLACK NEOPRENE	10	$ 43.60

DECK-MATE

Deck-Mates- for watertight flashing of metal roof & wall systems. Deck-Mates are designed in a multitude of sizes to accommodate penetrations from 1/8" to 26" round and work in conjunction with any configuration of metal roofing or siding panel. The Portals Plus Deck-Mate is engineered with an aluminum flanged base that can be bent by hand to conform to the roof profile, irregularities, or slopes. The aluminum flange is bonded to the flexible boot during the molding process and is completely isolated from the underside of the boot to prevent any potential galvanic corrosion such as happens with solid metal flashings. Deck-Mates are available in two flexible boot materials- EPDM, with a serviceable temperature range of -60F to +270F, and Silicone, for both extremely low and extremely high temperature applications, with a serviceable temperature range of -100F to +500F. Installation is quick, easy, and secure, requiring only an approved sealant on the underside and stainless fasteners. Portals Plus Adapter Rings can further extend the capabilities of the Deck-Mates by sealing unusual shapes such as angle irons and square tubes.



EPDM DECK-MATE

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
81006	DM#0 1/8" - 3/4"	15	$ 14.20
81016	DM#1 1/4" - 2"	15	$ 16.90
81026	DM#2 1" - 3-1/4"	15	$ 20.50
81036	DM#3 1/4" - 4"	15	$ 24.40
81040	DM#4 3" - 6"	10	$ 27.90
81050	DM#5 4" - 7"	10	$ 30.15
81060	DM#6 5" - 9"	10	$ 54.55
81070	DM#7 6" - 11"	10	$ 65.80
81085	DM#8 7" - 13"	5	$ 75.40
81091	DM#9 10" - 18"	1	$ 153.65
81101	DM#10 13" - 26"	1	$ 372.20

DECK-MATE

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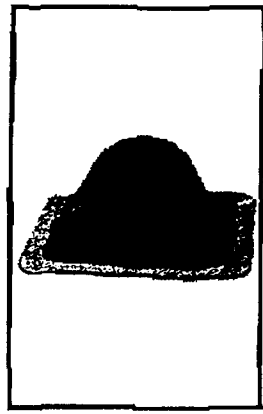
configuration of metal roofing or siding panel. The Portals Plus Deck-Mate is engineered with an aluminum flanged base that can be bent by hand to conform to the roof profile, irregularities, or slopes. The aluminum flange is bonded to the flexible boot during the molding process and is completely isolated from the underside of the boot to prevent any potential galvanic corrosion such as happens with solid metal flashings. Deck-Mates are available in two flexible boot materials- EPDM, with a serviceable temperature range of -60F to +270F, and Silicone, for both extremely low and extremely high temperature applications, with a serviceable temperature range of -100F to +500F. Installation is quick, easy, and secure, requiring only an approved sealant on the underside and stainless fasteners. Portals Plus Adapter Rings can further extend the capabilities of the Deck-Mates by sealing unusual shapes such as angle irons and square tubes.

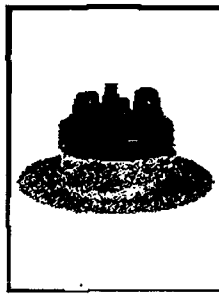


SILICONE DECK-MATE - HIGH TEMPERATURE w/CLAMP

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
82016	SDM#1 1/4" - 2"	15	$ 23.50
82026	SDM#2 1" - 3-1/4"	15	$ 26.90
82036	SDM#3 1/4" - 4"	15	$ 36.00
82040	SDM#4 3" - 6"	10	$ 69.75
82050	SDM#5 4" - 7"	10	$ 79.50
82060	SDM#6 5" - 9"	10	$ 92.90
82070	SDM#7 6" - 11"	10	$ 134.10
82085	SDM#8 7" - 13"	5	$ 204.75
82091	SDM#0 10" - 18"	1	$ 316.60
82101	SDM#0 13" - 26"	1	$ 588.65

ALUMI-FLASH SYSTEM

Alumi-Flash- for one to four penetrations in one watertight unit. Alumi-Flash makes pitch pans obsolete! Portals Plus Alumi-Flash consists of a flexible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, spun aluminum base. The flexible EPDM cap eliminates roof leaks because penetrations can expand, contract, and vibrate independently of the roofing system. There are five different cap styles available which can accommodate a variety of round pipes, tubes, and conduits from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. The EPDM cap is mechanically sealed to the Alumi-Flash base by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Alumi-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can modify these penetrations



ALUMI-FLASH EW w/ PRIMED FLANGE

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
22215 22225 22235 22245	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 83.00
22265 22275	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 84.00

ALUMI-FLASH SYSTEM

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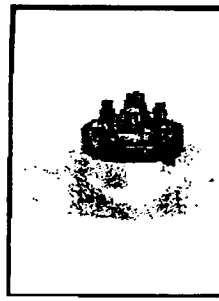
cap is mechanically sealed to the Alumi-Flash base by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Alumi-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can modify these penetrations

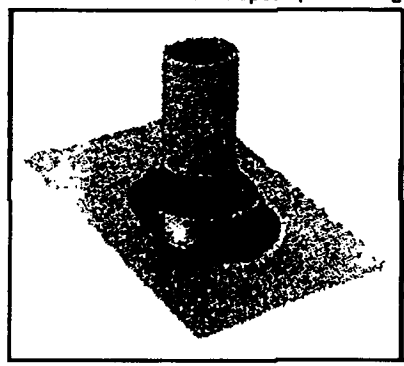


ALUMI-FLASH EW

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
23015 23025 23035 23045	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 70.50
23055 23065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 71.50

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.



GALVANIZED

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85009	1.25" - 1.50"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.46
85019	2"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.79
85029	3"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 6.29
85039	4"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 8.12

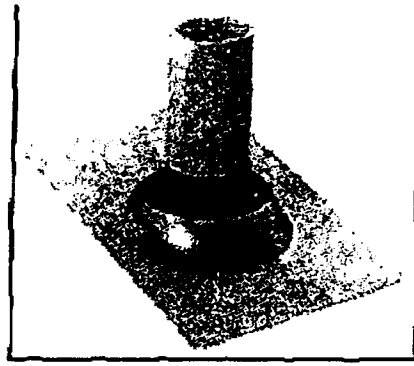
SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.

ALUMINUM

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85209	1.25" - 1.50"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 6.45

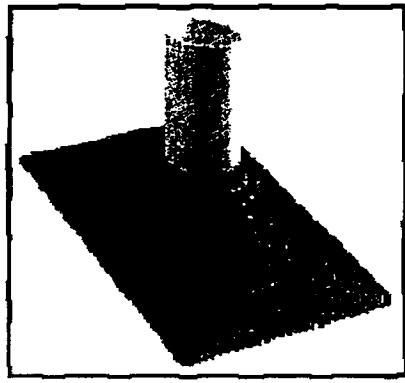
ALP00446



85219	2"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 6.95
85229	3"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.68
85239	4"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 9.29

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.



THERMOPLASTIC

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85309	1.25" - 1.50"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.36
85319	2"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.48
85329	3"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.59
85339	4"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 5.16

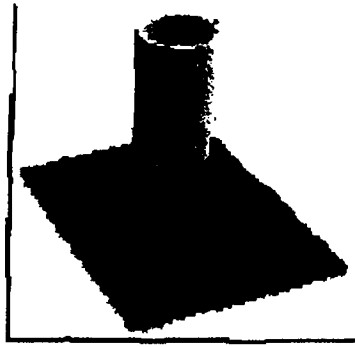
SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.

ELASTOMERIC

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85109	1.25" - 1.50"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 4.92
85119	2"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 5.17
85129	3"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 6.22

ALP00447

	85139	4"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 7.80

ALUMI-FLASH SYSTEM

Alumi-Flash- for one to four penetrations in one watertight unit. Alumi-Flash makes pitch pans obsolete! Portals Plus Alumi-Flash consists of a flexible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, spun aluminum base. The flexible EPDM cap eliminates roof leaks because penetrations can expand, contract, and vibrate independently of the roofing system. There are five different cap styles available which can accommodate a variety of round pipes, tubes, and conduits from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. The EPDM cap is mechanically sealed to the Alumi-Flash base by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Alumi-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can modify these penetrations

ALUMI-FLASH XT

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
24015 24025 24035 24045	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	4	$ 115.50
24065 24075	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	4	$ 118.00

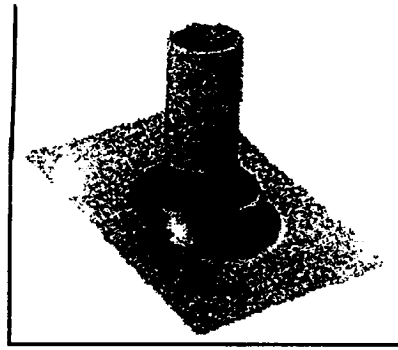
SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Multi Fit Shingle Flashings provide permanent elastic seals at pipe penetrations from 1-1/2" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Multi Fit Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Multi Fit Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.

GALVANIZED MULTI FIT

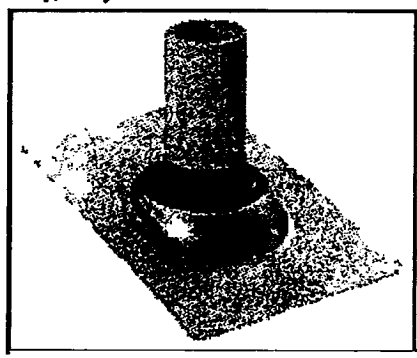
NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85049	1.50" - 2" - 3"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.77

ALP00448

	85059	3" - 4"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.77

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Multi Fit Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Multi Fit Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Multi Fit Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.



ALUMINUM MULTI FIT

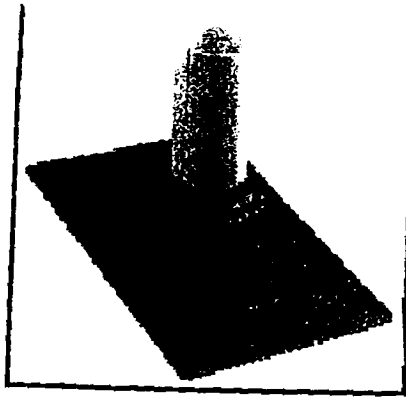
NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85249	1.50" - 2" - 3"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.17
85259	3" - 4"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.17

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Multi Fit Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Multi Fit Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Multi Fit Shingle Flashings are the solution to temporary, leaky field- fabricated sheet metal and roof cement flashings.

THERMOPLASTIC MULTI FIT

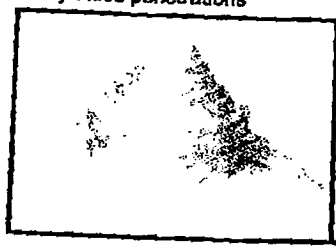
ALP00449



NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85349	1.50" - 2" - 3"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.70
85359	3" - 4"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.70

PLASTI-FLASH SYSTEM

Plasti-Flash- for one to four penetrations in one watertight unit. Plasti-Flash makes pitch pans obsolete! Portals Plus Plasti- Flash consists of a flexible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, weldable white PVC base. The flexible white EPDM cap eliminates roof leaks because penetrations can expand, contract, and vibrate independently of the roofing system. There are two different cap styles available which can accommodate a variety of round pipes, tubes, and conduits from 3/8" round through 6" round, and, with Portals Plus black Adapter Rings, angle irons and square tubes, as well. The white EPDM cap is mechanically sealed to the Plasti-Flash base by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Plasti-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can modify these penetrations



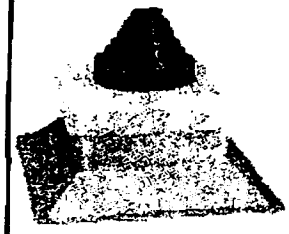
PLASTI-FLASH

NEW UPC PART NUMBER	OLD PART PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
26015 26025	PF104 PF102	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 57.00
26035	PF500	RETROFIT PLASTI-FLASH w/ SC36 RETROFIT BLACK CAP	5	$ 110.00

SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.

PIPE PORTAL® (Cover, Black Cap & Clamps) RC-2A



NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
32005 32015 32025 32035	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 79.00
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	$ 126.00
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 80.00
32101	SMALL RC-2A STRAIGHT SIDED CURB - 11" High	1	$ 83.00
32131	LARGE RC-2A STRAIGHT SIDED CURB - 11" High	1	$ 159.00

See more information about the caps.

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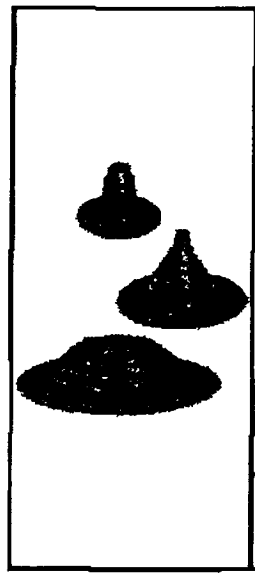
PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash



PIPE BOOTS (w/ CLAMPS)

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 16.80
42130	SMALL - WHITE EPDM	10	$ 18.00
44130	SMALL - WHITE HYPALON*	10	$ 19.20
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00
46209	MEDIUM - WHITE TPO**	8	$ CF.00
48009	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 78.00
42151	LARGE - WHITE EPDM	5	$ 80.00
43181	LARGE - BLACK NEOPRENE	5	$ 110.00
45000	QUADRASEAL 212R - BLACK EPDM	10	$ 32.00
45010	QUADRASEAL 412R - BLACK EPDM	10	$ 32.00
45020	QUADRASEAL 481R - BLACK EPDM	10	$ 32.00

* - AVAILABLE ON A LIMITED BASIS

** - ALL COLORS AVAILABLE (call Portals Plus)

$CF.00 - CONSULT FACTORY

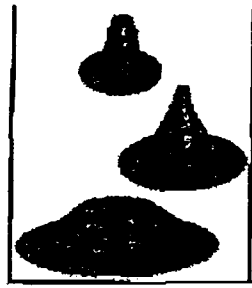
PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash

PIPE BOOTS (w/ ADHESIVE TAPE)

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT



42500	SMALL - BLACK EPDM	10	$ 22.60
42510	MEDIUM - BLACK EPDM	10	$ 32.60
43570	MEDIUM - BLACK NEOPRENE	10	$ 43.60

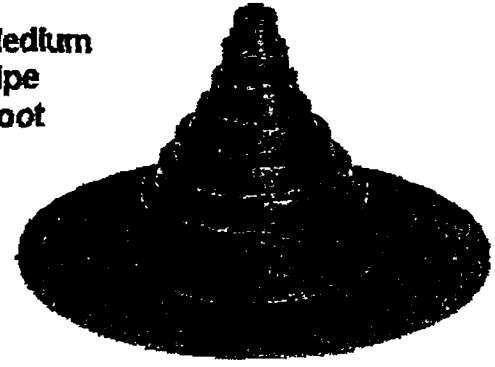
ALP00453

Pipe Flashings

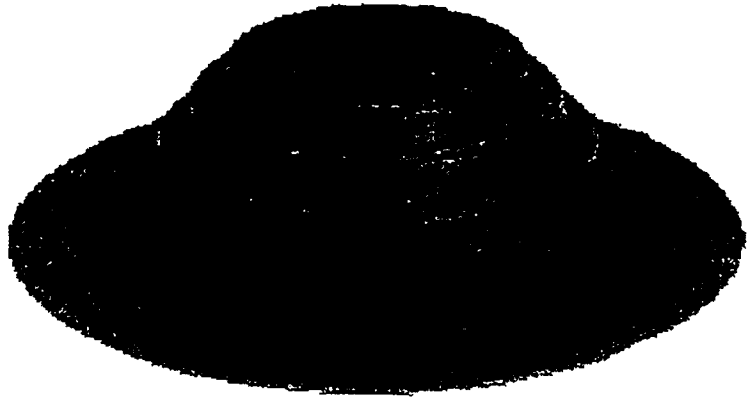
Technical Product Information

Flashings for all size penetrations for single ply roofs

Small Pipe Boot



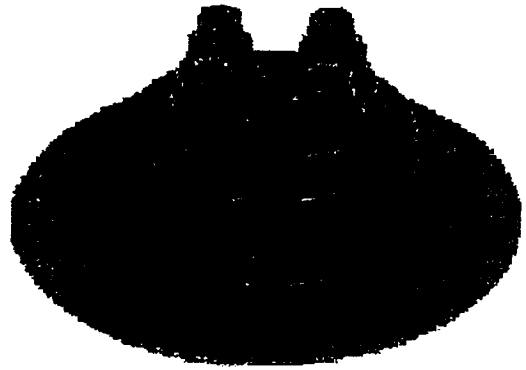
Medium Pipe Boot



Large Pipe Boot

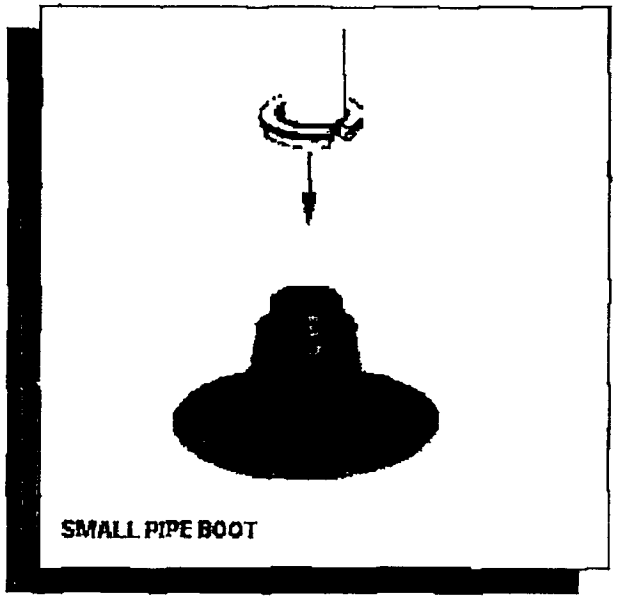
ALP00454

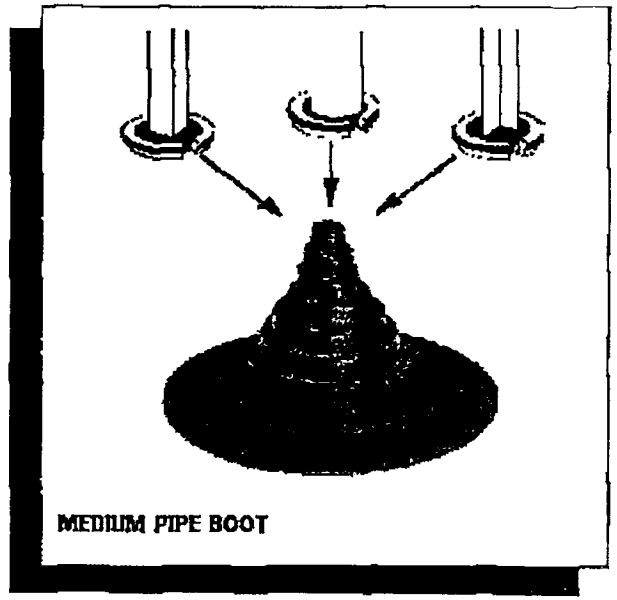
Quadraseal Pipe Boot

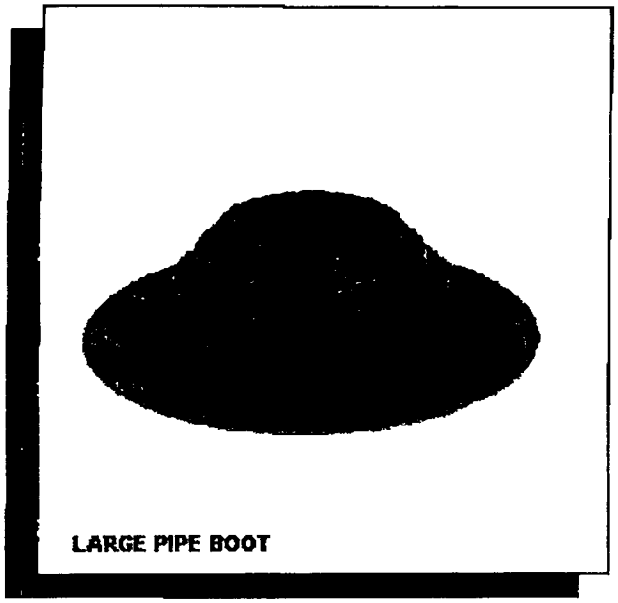


The "Pipe Boot" is an economical flashing designed for single pipe penetrations on single ply rubber roofs. The unit will accomodate virtually all pipe sizes: 1.75" and 2.75" on Small Pipe Boot, 1" through 6" on Medium Pipe Boot and 8" through 12" on Large Pipe Boot. Pipe Boots are available in EPDM, Neoprene, Hypalon, TPO, or PVC material. The Quadraseal is designed to allow as many as four pipes up to 2" in diameter to pass through one flashing. Quadraseals are available in EPDM material only. The conically shaped steps of the Portals Plus pipe flashing will securely seal all pipes and the large double thick molded rib at the top of each step offers supreme tear resistance and reinforcement, as well as a cutting guide. Utilizing the Pipe Flashings eliminates the workmanship error in field fabrication and makes flashing pipes a clean, consistent approach.

Adapters available for round, square tube, and angle iron available to fit most pipe boots.







LARGE PIPE BOOT

QUADRASEAL 412R

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 16.80
42130	SMALL - WHITE EPDM	10	$ 18.00
44130	SMALL - WHITE HYPALON*	10	$ 19.20
42110	MEDIUM - BLACK EPDM	10	$ 22.00
42140	MEDIUM - WHITE EPDM	10	$ 26.50
43170	MEDIUM - BLACK NEOPRENE	10	$ 33.20
44170	MEDIUM - WHITE HYPALON*	10	$ 28.00
OEM	MEDIUM - WHITE TPO**	8	$ CF.00
OEM	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 78.00
42151	LARGE - WHITE EPDM	5	$ 80.00
43181	LARGE - WHITE NEOPRENE	5	$ 110.00

** - ALL COLORS AVAILABLE FOR TPO & PVC (call Portals Plus)
CF - DENOTES CALL FACTORY

Quadraseals
Adapter Rings

Other Flashing Systems:
Pipe Portals

ALP00456

Installation Instructions
CAD Page

Double Pipe Portals
Alumi-Flash

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All information is subject to change without notice. Dimensions and specifications shown are within manufacturing tolerances.
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RPS ACCESSORIES

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(630) 595-7320

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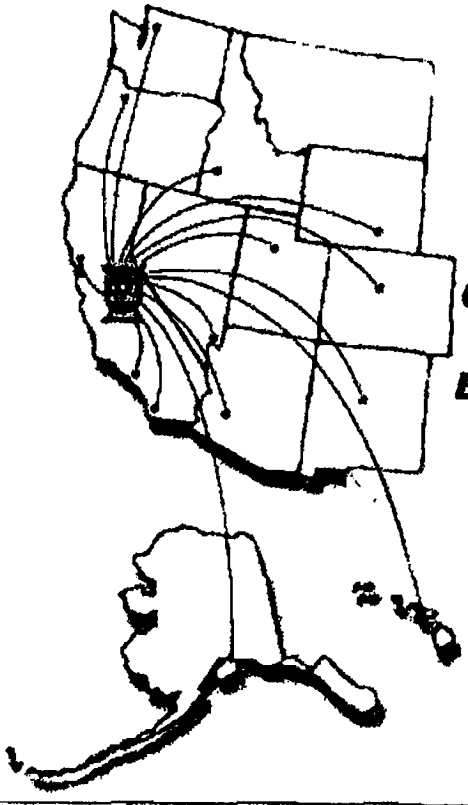

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ALP00458

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Milcor specializes in manufacturing Heat & Smoke vents, Roof Access Hatches, and Access Doors available nationwide through a network of local stocking wholesale distributors.

Portals Plus specializes in stock rooftop accessory products for the roofing, HVACR, and plumbing trades. All Portals Plus products are available nationwide through a network of local stocking wholesale distributors.

Roof Products & Systems (RPS) specializes in custom manufactured roof curbs and supports for HVACR. All RPS products are available nationwide through a network of local representatives.

ALP00460

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PORTALS PLUS

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Roof Access Hatches and Heat & Smoke Vents

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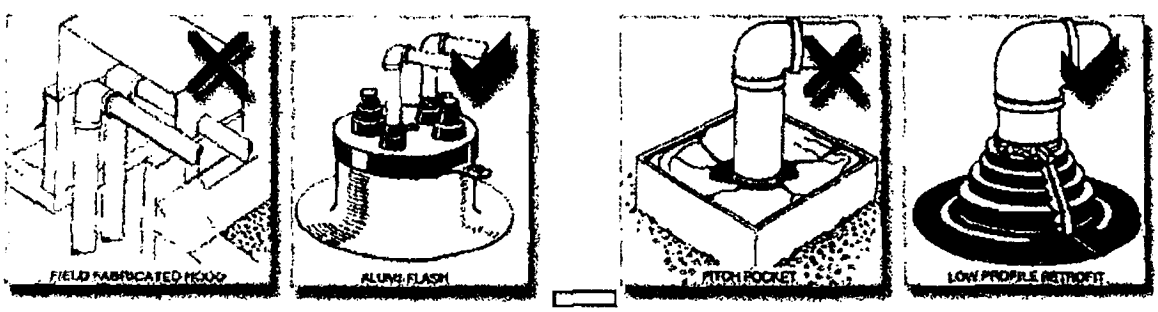
- Installation
- Warranty
- Submittal Sheets
- Contacts

Portals Plus manufactures solutions for roof leak problems. Roof leaks are the biggest problem of architects and building owners. 85% of all roof leaks occur at penetrations and corners due to poor details which fail to accommodate movement. Extreme roof temperature swings require durable and flexible flashings. However, high labor costs and low common denominator standards create conditions for poor workmanship and non-functional field fabricated flashings. A "good enough" attitude creates temporary expedients, such as pitch pockets or pans and their derivatives, but at the building owner's ongoing expense. The National Roofing Contractors Association (NRCA) states that "Pitch pockets or pans by their design, are not intended to be continuously watertight. Their use should not be encouraged since better methods are available to accomplish the same end. Pitch pans or pockets require frequent inspection and maintenance, and usually a great deal of damage can occur before the leak around a pitch pocket or pan is evident."



ALP00461

Portals Plus has been manufacturing its unique products since 1977 in state-of-the-art manufacturing facilities in the Chicago suburbs.

'ortals Plus products are readily available across the USA and Canada through a network of local tocking wholesale distributors. Call 800-624-8642 or 630-595-7320 for the stocking distributor near you ır for international availability.

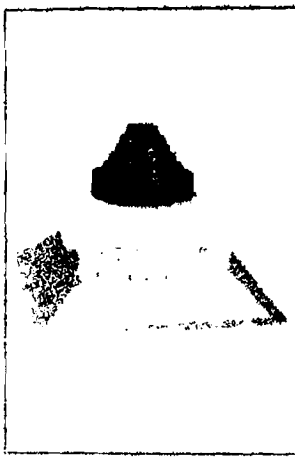
Commercial Products Group 484 N. Thomas Drive, Bensenville, IL 60106
TEL 630-595-7320 FAX 630-766-5259
portalsplus@portalsplus.com

ALP00462

Product Selection

SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



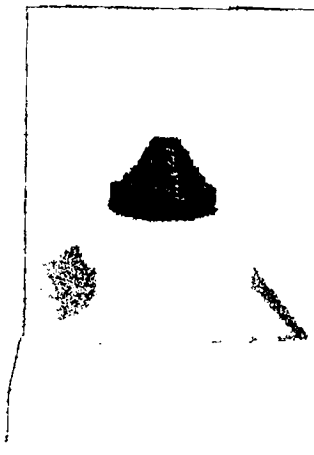
PIPE PORTAL® (Cover, Black Cap & Clamps) RC-3A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
32005 32015 32025 32035	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 96.80
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	$ 154.40
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 98.00
32111	SMALL RC-3A CANTED CURB - 8" High	1	$ 104.00
32141	LARGE RC-3A CANTED CURB - 8" High	1	$ 199.00

See more information about the caps.

SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



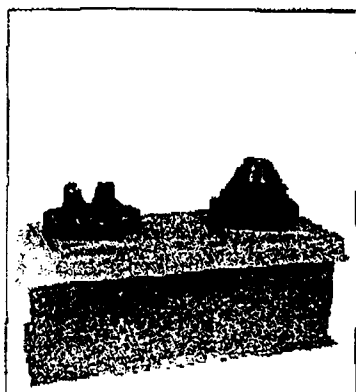
PIPE PORTAL® (Cover, Black Cap & Clamps) RC-4A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
32005 32015 32025 32035	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 96.80
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	$ 154.40
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 98.00
32121	SMALL RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 104.00

	32151	LARGE RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 199.00

DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution o routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable emperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-2A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP	2	$ 293.00
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP		
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32161	DOUBLE RC-2A STRAIGHT SIDED CURB -11" High	1	$ 220.00

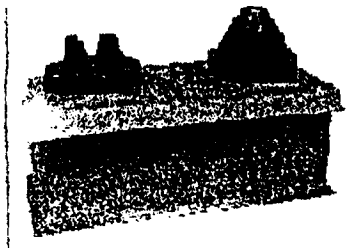
See more information about the caps.

DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution o routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable emperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.

DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-3A

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT

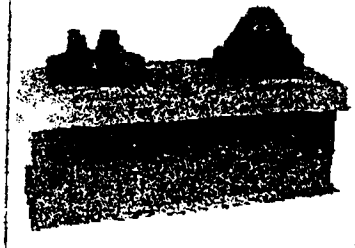


36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP	2	$ 293.00
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP		
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32171	DOUBLE RC-3A CANTED CURB - 8" High	1	$ 220.00

See more information about the caps.

DOUBLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.



DOUBLE PIPE PORTAL® (Cover, Cap & Clamps) RC-4A

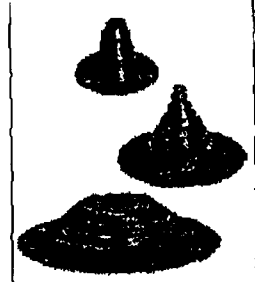
NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
36002	DOUBLE COVER & CAPS w/126 & 212 BLACK CAP	2	$ 293.00
36012	DOUBLE COVER & CAPS w/126 & 412 BLACK CAP		
36022	DOUBLE COVER & CAPS w/126 & 481 BLACK CAP		
36032	DOUBLE COVER & CAPS w/126 & 126 BLACK CAP		
36042	DOUBLE COVER & CAPS w/212 & 212 BLACK CAP		
36052	DOUBLE COVER & CAPS w/212 & 412 BLACK CAP		
36062	DOUBLE COVER & CAPS w/212 & 481 BLACK CAP		
36092	DOUBLE COVER & CAPS w/412 & 412 BLACK CAP		
36102	DOUBLE COVER & CAPS w/412 & 481 BLACK CAP		
36142	DOUBLE COVER & CAPS w/481 & 481 BLACK CAP		
32181	DOUBLE RC-4A RAISED CANTED CURB -9 1/2" High	1	$ 220.00

See more information about the caps.

PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash



PIPE BOOTS (w/ CLAMPS)

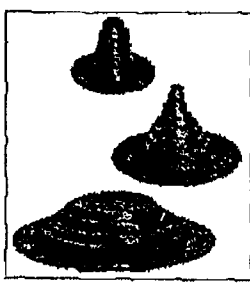
NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 20.60
42130	SMALL - WHITE EPDM	10	$ 22.05
44130	SMALL - WHITE HYPALON*	10	$ 23.50
42110	MEDIUM - BLACK EPDM	10	$ 26.95
42140	MEDIUM - WHITE EPDM	10	$ 32.55
43170	MEDIUM - BLACK NEOPRENE	10	$ 40.70
44170	MEDIUM - WHITE HYPALON*	10	$ 34.40
46209	MEDIUM - WHITE TPO**	8	$ CF.00
48009	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 95.55
42151	LARGE - WHITE EPDM	5	$ 98.00
43181	LARGE - BLACK NEOPRENE	5	$ 134.75
45000	QUADRASEAL 212R - BLACK EPDM	10	$ 42.00
45010	QUADRASEAL 412R - BLACK EPDM	10	$ 42.00
45020	QUADRASEAL 481R - BLACK EPDM	10	$ 42.00

* - AVAILABLE ON A LIMITED BASIS
** - ALL COLORS AVAILABLE (call Portals Plus)
$CF.00 - CONSULT FACTORY

PIPE BOOTS

Pipe Flashings (boots)- for economical flashings of single ply roofing systems. Pipe Boots (or witches' hats) are economical flashings designed for single pipe penetrations through single ply roofs. Virtually any common pipe size can be accommodated with one of these boots. The conically shaped steps of the Portals Plus Pipe Boots will securely seal all pipes and its large double thick molded rib at the top of each step offers superior tear resistance and reinforcement, as well as a cutting guide for installation. The Portls Plus Stainless Snaplock Clamp maximizes the secure seal at the penetration. Utilizing the Pipe Boots eliminates workmanship errors in field fabrication and makes flashing pipes a clean, consistent approach. Portals Plus Adapter Rings can be used to seal very small pipes, as well as unusual shapes such as angle irons and square tubes.

Other Flashing Systems: Pipe Portals, Double Pipe Portals, Alumi-Flash



PIPE BOOTS (w/ ADHESIVE TAPE)

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42500	SMALL - BLACK EPDM	10	$ 27.70
42510	MEDIUM - BLACK EPDM	10	$ 40.00
43570	MEDIUM - BLACK NEOPRENE	10	$ 53.50

DECK-MATE

Deck-Mates- for watertight flashing of metal roof & wall systems. Deck-Mates are designed in a multitude of sizes to accommodate penetrations from 1/8" to 26" round and work in conjunction with any configuration of metal roofing or siding panel. The Portals Plus Deck-Mate is engineered with an aluminum flanged base that can be bent by hand to conform to the roof profile, irregularities, or slopes. The aluminum flange is bonded to the flexible boot during the molding process and is completely isolated from the underside of the boot to prevent any potential galvanic corrosion such as happens with solid metal flashings. Deck-Mates are available in two flexible boot materials- EPDM, with a serviceable temperature range of -60F to +270F, and Silicone, for both extremely low and extremely high temperature applications, with a serviceable temperature range of -100F to +500F. Installation is quick, easy, and secure, requiring only an approved sealant on the underside and stainless fasteners. Portals Plus Adapter Rings can further extend the capabilities of the Deck-Mates by sealing unusual shapes such as angle irons and square tubes.

EPDM DECK-MATE

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
81006	DM#0 1/8" - 3/4"	15	$ 17.40
81016	DM#1 1/4" - 2"	15	$ 20.75
81026	DM#2 1" - 3-1/4"	15	$ 25.20
81036	DM#3 1/4" - 4"	15	$ 29.90
81040	DM#4 3" - 6"	10	$ 34.20
81050	DM#5 4" - 7"	10	$ 37.60
81060	DM#6 5" - 9"	10	$ 66.85
81070	DM#7 6" - 11"	10	$ 80.65
81085	DM#8 7" - 13"	5	$ 92.35
81091	DM#9 10" - 18"	1	$ 188.20
81101	DM#10 13" - 26"	1	$ 455.90

DECK-MATE

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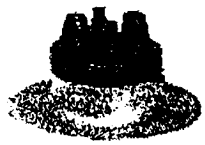
SILICONE DECK-MATE - HIGH TEMPERATURE w/CLAMP

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
82016	SDM#1 1/4" - 2"	15	$ 28.90
82026	SDM#2 1" - 3-1/4"	15	$ 32.95
82036	SDM#3 1/4" - 4"	15	$ 44.15
82040	SDM#4 3" - 6"	10	$ 85.45
82050	SDM#5 4" - 7"	10	$ 97.45
82060	SDM#6 5" - 9"	10	$ 113.80
82070	SDM#7 6" - 11"	10	$ 164.30
82085	SDM#8 7" - 13"	5	$ 250.80
82091	SDM#0 10" - 18"	1	$ 387.80
82101	SDM#0 13" - 26"	1	$ 720.95

ALUMI-FLASH SYSTEM

Alumi-Flash- for one to four penetrations in one watertight unit. Alumi-Flash makes pitch pans obsolete! Portals Plus Alumi-Flash consists of a flexible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, spun aluminum base. The flexible EPDM cap eliminates roof leaks because penetrations can expand, contract, and vibrate independently of the roofing system. There are five different cap styles available which can accommodate a variety of round pipes, tubes, and conduits from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. The EPDM cap is mechanically sealed to the Alumi-Flash base by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Alumi-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can modify these penetrations

ALUMI-FLASH EW w/ PRIMED FLANGE



NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
22215 22225 22235 22245	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 101.65
22265 22275	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 102.90

ALUMI-FLASH SYSTEM

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ALUMI-FLASH EW

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
23015 23025 23035 23045	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	$ 86.30
23055 23065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 87.60

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field-fabricated sheet metal and roof cement flashings.

GALVANIZED

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85009	1.25" - 1.50"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 6.40
85019	2"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 6.75
85029	3"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 7.35
85039	4"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 9.50

SHINGLE FLASHING SYSTEMS

ALP00468

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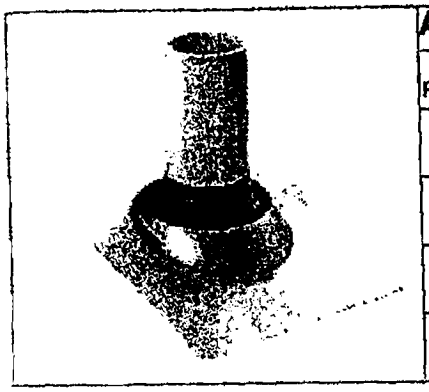

ALUMINUM

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85209	1.25" - 1.50"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.60
85219	2"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 8.10
85229	3"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 9.00
85239	4"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 10.80

SHINGLE FLASHING SYSTEMS

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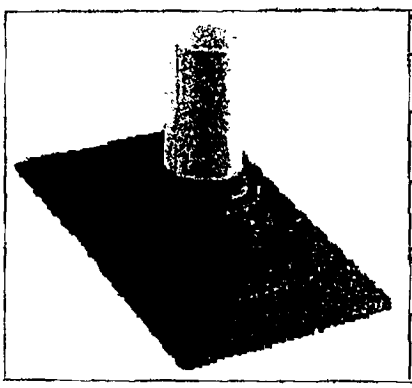
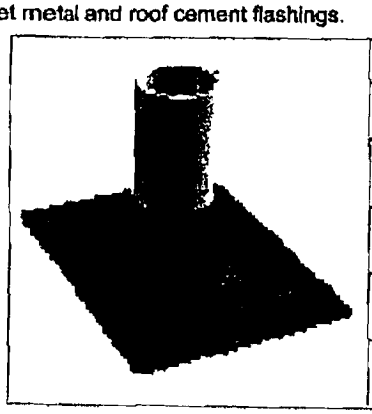


THERMOPLASTIC

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85309	1.25" - 1.50"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 5.10
85319	2"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 5.25
85329	3"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 5.35
85339	4"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 6.05

SHINGLE FLASHING SYSTEMS

Shingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Shingle Flashings provide permanent elastic seals at pipe penetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Shingle Flashings consist of an elastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Also available is an all elastomeric one piece Shingle Flashing which can accommodate roof slopes up to 45 degrees. Shingle Flashings are the solution to temporary, leaky field-fabricated sheet metal and roof cement flashings.



ELASTOMERIC

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85109	1.25" - 1.50"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 5.75
85119	2"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 6.05
85129	3"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 7.25
85139	4"	ELASTOMERIC FLASHING BASE w/ elastomeric collar	$ 9.10

ALUMI-FLASH SYSTEM

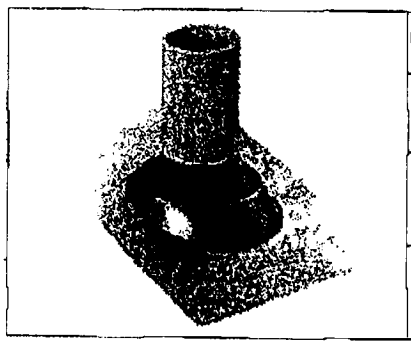
lumi-Flash- for one to four penetrations in one watertight unit. Alumi-Flash makes pitch pans obsoletel Portals Plus Alumi-Flash consists of a exible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, spun aluminum base. The flexible EPDM cap eliminates roof leaks because enetrations can expand, contract, and vibrate independently of the roofing system. There are five different cap styles available which can ccommodate a variety of round pipes, tubes, and conduits from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons nd square tubes, as well. The EPDM cap is mechanically sealed to the Alumi-Flash base by a double "Weather-Tite Pressure Seal", which onsists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. The Portals Plus Alumi-lash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to install. Adapter Rings can odify these penetrations

ALUMI-FLASH XT

NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
24015 24025 24035 24045	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	4	$ 141.50
24065 24075	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	4	$ 144.50

SHINGLE FLASHING SYSTEMS

hingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Multi Fit Shingle Flashings provide permanent elastic seals at pipe enetrations from 1-1/2" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Multi Fit Shingle Flashings consist of an lastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Multi Fit Shingle Flashings are the solution to emporary, leaky field- fabricated sheet metal and roof cement flashings.

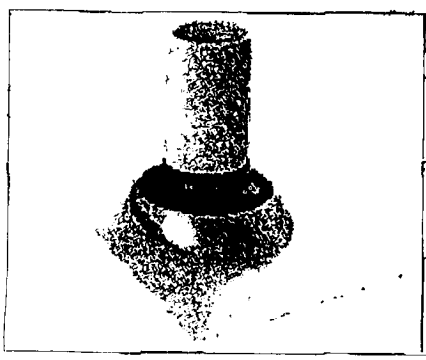


GALVANIZED MULTI FIT

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85049	1.50" - 2" - 3"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.77
85059	3" - 4"	GALVANIZED FLASHING BASE w/ elastomeric collar	$ 5.77

SHINGLE FLASHING SYSTEMS

hingle Flashings- for effectively sealing pipe penetrations on shingle roofs. Multi Fit Shingle Flashings provide permanent elastic seals at pipe enetrations from 1- 1/4" to 4" round on all shingle roofing systems up to a 40 degree slope. Portals Plus Multi Fit Shingle Flashings consist of an lastomeric collar locked into a nailable rigid base which integrates into the shingle roofing system. Multi Fit Shingle Flashings are the solution to emporary, leaky field- fabricated sheet metal and roof cement flashings.



ALUMINUM MULTI FIT

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85249	1.50" - 2" - 3"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.17
85259	3" - 4"	ALUMINUM FLASHING BASE w/ elastomeric collar	$ 7.17

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SHINGLE FLASHING SYSTEMS

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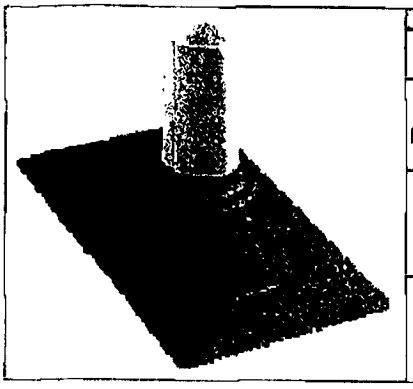


THERMOPLASTIC MULTI FIT

NEW UPC PART NUMBER	SIZE	DESCRIPTION	LIST PRICE PER UNIT
85349	1.50" - 2" - 3"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.70
85359	3" - 4"	TERMOPLASTIC FLASHING BASE w/ elastomeric collar	$ 4.70

PLASTI-FLASH SYSTEM

lasti-Flash- for one to four penetrations in one watertight unit. Plasti-Flash makes pitch pans obsolete! Portals Plus Plasti- Flash consists of a exible EPDM cap w/Stainless Snaplock Clamp(s) and a one piece, weldable white PVC base. The flexible white EPDM cap eliminates roof eaks because penetrations can expand, contract, and vibrate independently of the roofing system. There are two different cap styles available hich can accommodate a variety of round pipes, tubes, and conduits from 3/8" round through 6" round, and, with Portals Plus black Adapter ings, angle irons and square tubes, as well. The white EPDM cap is mechanically sealed to the Plasti-Flash base by a double "Weather-Tite ressure Seal", which consists of two beads formed into the collar of the base that mate with double grooves molded into the inside of the cap. he Portals Plus Plasti-Flash provides a permanent, watertight, and maintenance-free means for penetrating roofs that is simple and easy to istall.
dapter Rings can modify these penetrations

PLASTI-FLASH

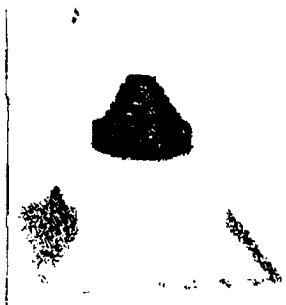
NEW UPC PART NUMBER	OLD PART PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
26015 26025	PF104 PF102	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	$ 69.85
26035	PF500	RETROFIT PLASTI-FLASH w/ SC36 RETROFIT BLACK CAP	5	$ 134.75

SINGLE PIPE PORTAL SYSTEM

Pipe Portal System - for one to eight penetrations in one watertight unit. The Pipe Portal System is a versatile, leak proof, and weathertight solution to routing pipes through a roof. The Pipe Portal System is designed to allow both horizontal and vertical pipe movement, yet provide a maintenance-free permanent installation which accommodates penetrations from 3/8" round through 12" round, and, with Portals Plus Adapter Rings, angle irons and square tubes, as well. Compression molded EPDM rubber caps provide the flexible seal at each penetration. Stainless Snaplock Clamps provide an added measure of assurance at each penetration. The flexible EPDM caps are mechanically sealed to the Pipe Portal cover by a double "Weather-Tite Pressure Seal", which consists of two beads formed into the collar of the cover that mate with double grooves molded into the inside of the cap. The curb cover is molded of one piece ultraviolet-resistant ABS plastic and laminated with an acrylic coating for extra protection. This manufacturing process creates exposed materials that are both ozone and ultraviolet resistant with a serviceable temperature range of -40F to +160F. To complete the system, the roof curb is fabricated from heavy 18 gauge galvanized iron with mitered and welded corners and insulated on all four sides. The Pipe Portal System allows roofing membranes and base flashings to be installed in accordance with the National Roofing Contractors Association (NRCA) recommendations.

PIPE PORTAL® (Cover, Black Cap & Clamps) RC-2A

ALP00471



NEW UPC PART NUMBER	DESCRIPTION	QTY/ CTN	LIST PRICE PER UNIT
32005 32015 32025 32035	w/ 126 BLACK CAP (1 - 2" to 6" pipe) w/ 212 BLACK CAP (2 - .375" to 1 & 2 - 1" - 2" pipes) w/ 412 BLACK CAP (4 - 1" to 2" pipes) w/ 481 BLACK CAP (4 - .375" to 1" pipes)	5	**$ 96.80**
32041	w/ 182 BLACK CAP (1 - 8" to 12" pipe)	1	**$ 154.40**
32055 32065	w/ 126 WHITE CAP (1 - 2" to 6" pipe) w/ 212 WHITE CAP (2 - .375" to 1 & 2 - 1" - 2" pipes)	5	**$ 98.00**
32101	SMALL RC-2A STRAIGHT SIDED CURB - 11" High	1	**$ 104.00**
32131	LARGE RC-2A STRAIGHT SIDED CURB - 11" High	1	**$ 199.00**

See more information about the caps.

PORTALS PLUS 464 N. Thomas Drive, Bensenville, IL 60106 TEL: (630) 595-7320 FAX: (630) 766-5259

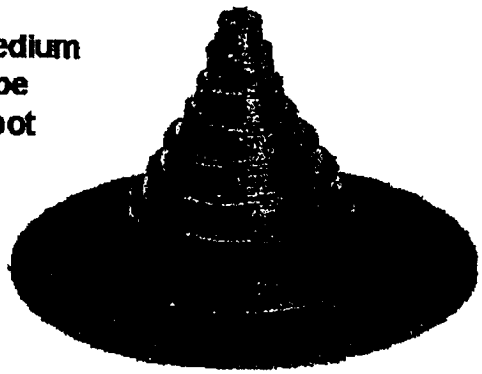
ALP00472

Pipe Flashings

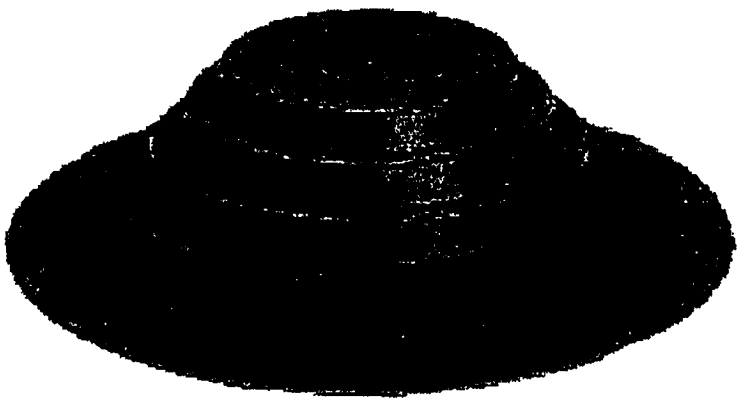
Technical Product Information

Flashings for all size penetrations for single ply roofs

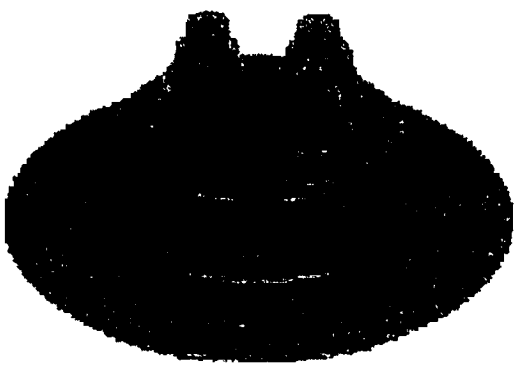
Small Pipe Boot



Medium Pipe Boot



Large Pipe Boot

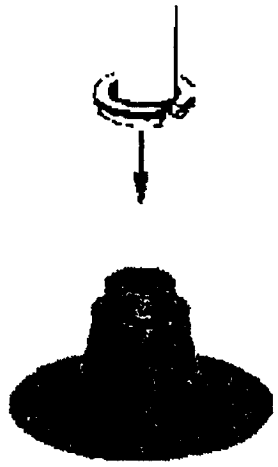


Quadraseal Pipe Boot

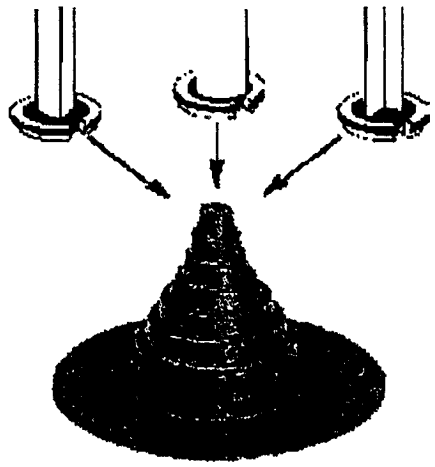
The "Pipe Boot" is an economical flashing designed for single pipe penetrations on single ply rubber roofs. The unit will accomodate virtually all pipe sizes: 1.75" and 2.75" on Small Pipe Boot, 1" through 6" on Medium Pipe Boot and 8" through 12" on Large Pipe Boot. Pipe Boots are available in EPDM, Neoprene, Hypalon, TPO, or PVC material. The Quadraseal is designed to allow as many as four pipes up to 2" in diameter to pass through one flashing. Quadraseals are available in EPDM material only. The conically shaped steps of the Portals Plus pipe flashing will securely seal all pipes and the large double thick molded rib at the top of each step offers supreme tear resistance and reinforcement, as well as a cutting guide. Utilizing the Pipe Flashings eliminates the workmanship error in field fabrication and makes flashing pipes a clean, consistent approach.

Adapters available for round, square tube, and angle iron available to fit most pipe boots.

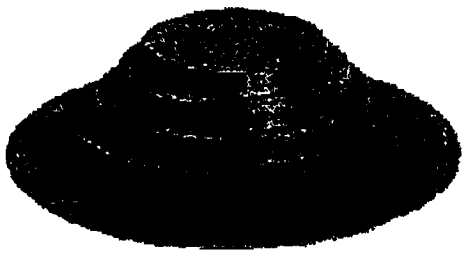
ALP00473



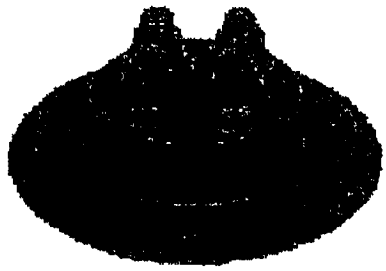
SMALL PIPE BOOT



MEDIUM PIPE BOOT



LARGE PIPE BOOT



QUADRASEAL 412R

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	$ 20.60
42130	SMALL - WHITE EPDM	10	$ 22.05
44130	SMALL - WHITE HYPALON*	10	$ 23.50
42110	MEDIUM - BLACK EPDM	10	$ 26.95
42140	MEDIUM - WHITE EPDM	10	$ 32.55
43170	MEDIUM - BLACK NEOPRENE	10	$ 40.70
44170	MEDIUM - WHITE HYPALON*	10	$ 34.40
OEM	MEDIUM - WHITE TPO**	8	$ CF.00
OEM	MEDIUM - WHITE PVC**	8	$ CF.00
42121	LARGE - BLACK EPDM	5	$ 95.55
42151	LARGE - WHITE EPDM	5	$ 98.00
43181	LARGE - WHITE NEOPRENE	5	$ 134.75

ALP00474

** - ALL COLORS AVAILABLE FOR TPO & PVC (call Portals Plus)
CF - DENOTES CALL FACTORY

Quadraseals
Adapter Rings
Installation Instructions
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

PORTALS PLUS 484 N. Thomas Drive, Bensenville, IL 60106 TEL: (630) 595-7320 FAX: (630) 766-5259

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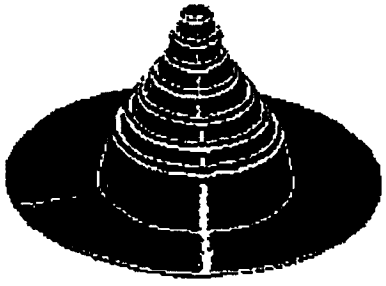
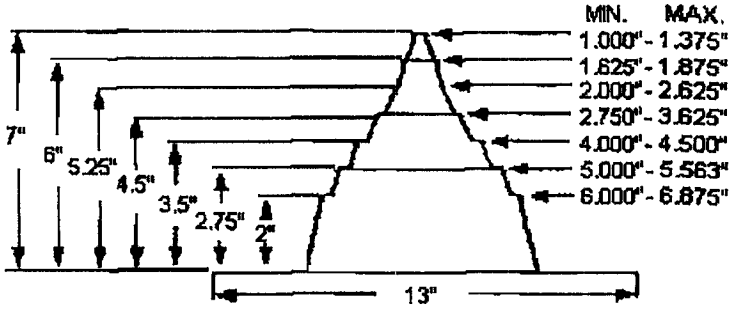
ALP00475

Pipe Flashings

Technical Product Information

Medium Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Medium Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is less than 6" in diameter. The Medium Pipe Boot shall include 60 mil EPDM, NEOPRENE, or HYPALON compression molded body. The Medium Pipe Boot shall also include Portals Plus' Snaplock Clamp. Whenever necessary utilize Portals Plus Adapters to seal to square tubing and angle iron and for round penetrations less than 1" in diameter. Use white or black as necessary. Attachment of Medium Pipe Boot to roof system shall be done in accordance with Portals Plus Installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42110	MEDIUM - BLACK EPDM	10	**$ 26.95**
42140	MEDIUM - WHITE EPDM	10	**$ 32.55**
43170	MEDIUM - BLACK NEOPRENE	10	**$ 40.70**
44170	MEDIUM - WHITE HYPALON*	10	**$ 31.85**

* - AVAILABLE ON A LIMITED BASIS

Quadraseals.
Adapter Rings.
Installation Instructions.
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

PORTALS PLUS 484 N. Thomas Drive, Bensenville, IL 60106 TEL: (630) 595-7320 FAX: (630) 766-5259

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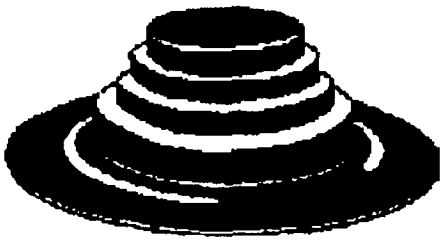
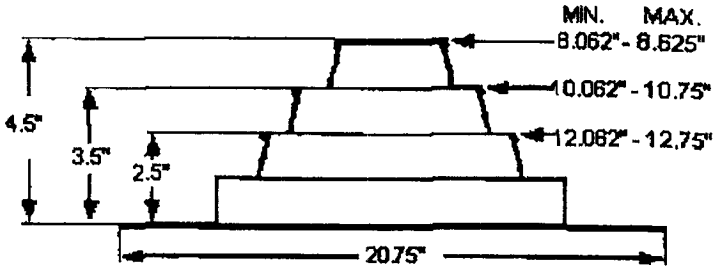
ALP00476

Pipe Flashings

Technical Product Information

Large Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Large Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is from 8" to 12" in diameter. The Large Pipe Boot shall include 60 mil EPDM or NEOPRENE compression molded body. The Large Pipe Boot shall also include Portals Plus' Snaplock Clamp. Use white or black as necessary. Attachment of Large Pipe Boot to roof system shall be done in accordance with Portals Plus Installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42121	LARGE - BLACK EPDM	5	**$ 95.55**
42151	LARGE - WHITE EPDM	5	**$ 98.00**
43181	LARGE - BLACK NEOPRENE	5	**$ 134.75**

Quadraseals.
Adapter Rings.
Installation Instructions.
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

PORTALS PLUS *484 N. Thomas Drive, Bensenville, IL 60106* *TEL: (630) 595-7320 FAX: (630) 766-6259*

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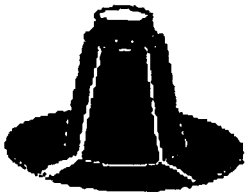
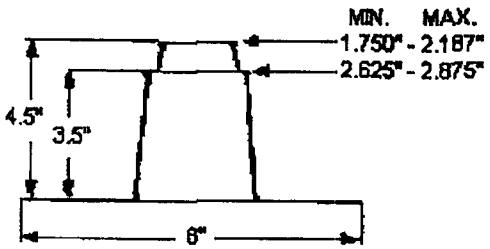
Pipe Flashings

Technical Product Information

Small Pipe Boot





SPECIFICATION

Furnish and install the Portals Plus Small Pipe Boot as manufactured by Portals Plus, Inc., Bensenville, IL, at all points where any projection penetrates the roof system, and is less than 3" in diameter. The Small Pipe Boot shall include 60 mil EPDM, NEOPRENE, or HYPALON compression molded body. The Small Pipe Boot shall also include Portals Plus' Snaplock Clamp. Use white or black as necessary. Use Portals Plus Adapter Rings for round penetrations less than 1" diameter. Attachment of Small Pipe Boot to roof system shall be done in accordance with Portals Plus installation Instructions and the roofing membrane manufacturer's requirements.

NEW UPC PART NUMBER	DESCRIPTION	QTY/CTN	LIST PRICE PER UNIT
42100	SMALL - BLACK EPDM	10	**$ 20.60**
42130	SMALL - WHITE EPDM	10	**$ 22.05**
44130	SMALL - WHITE HYPALON*	10	**$ 23.50**

* - AVAILABLE ON A LIMITED BASIS

Quadraseals.
Adapter Rings.
Installation Instructions.
CAD Page

Other Flashing Systems:
Pipe Portals
Double Pipe Portals
Alumi-Flash

Main Page

PORTALS PLUS 454 N. Thomas Drive, Bensenville, IL 60106 TEL: (630) 595-7320 FAX: (630) 766-5259

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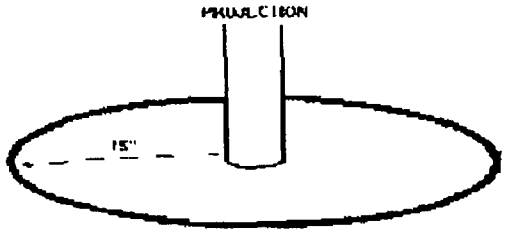
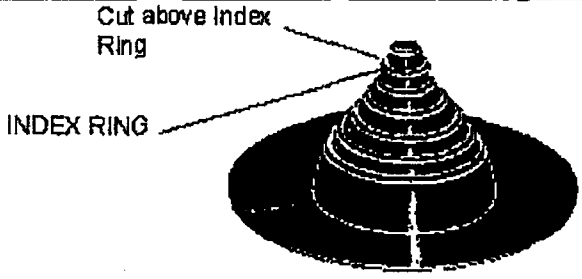
ALP00478

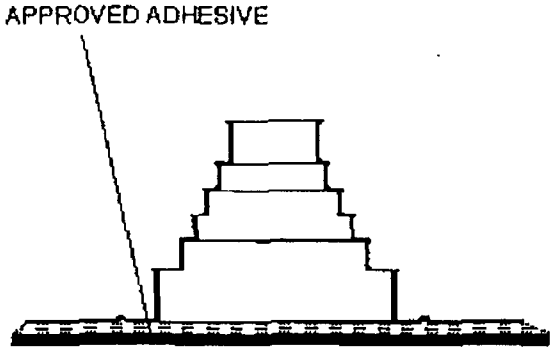
Installation Instructions



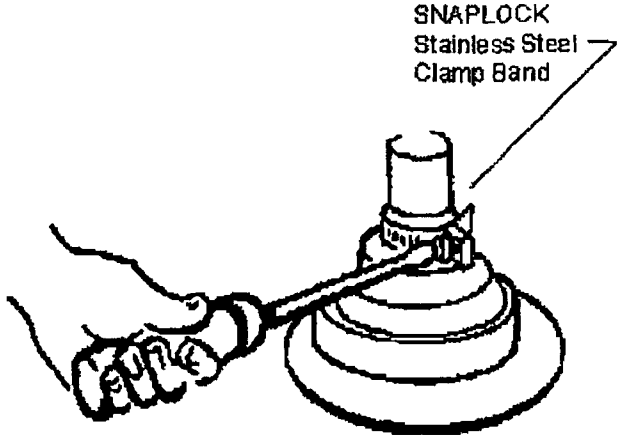
STEP 1
Clean and prepare surface 15" in all directions from the penetration. Check with roofing manufacturer to determine if any special preparations are required.



STEP 2
Select proper step of the flashing and cut off above index ring. REMEMBER: When in doubt, cut the smaller size. Clean and prime flange in accordance with roofing manufacturer's recommendations.



STEP 3
Apply roofing manufacturers' specified adhesive on base flange of boot and place boot around projection and complete attachment of flashing to roofing, according to roofing manufacturers' specification.



STEP 4
Using the Stainless Steel SnapLock Clamp, place at top of boot and tighten to projection.

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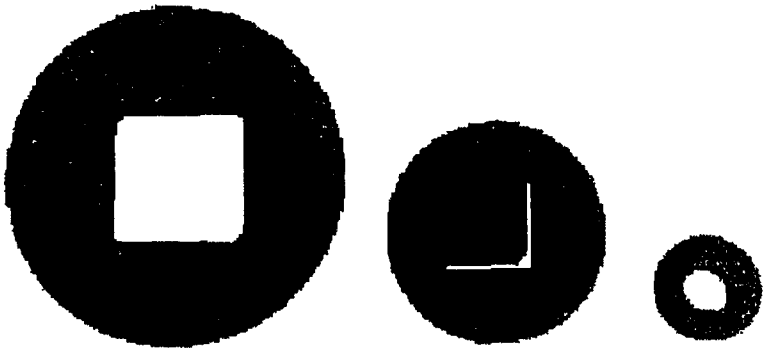
Adapter Rings

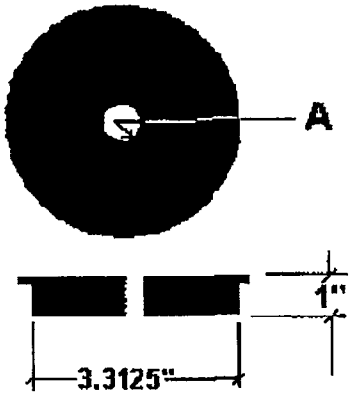
Technical Product Information

For use with all new installation and retrofit penetration flashings



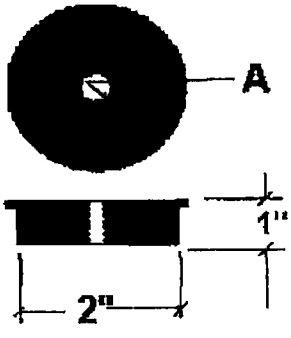
LARGE ROUND ADAPTERS

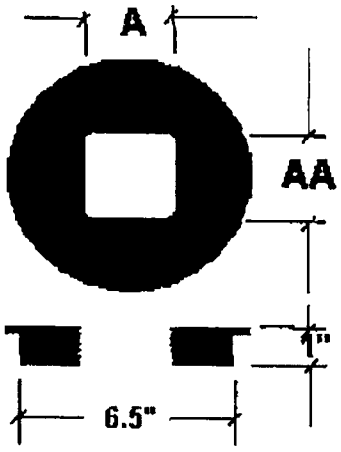
Part #	Projection O.D. Diameter	A
D001	.50"	.25"
D002	.75"	.50"
D003	.875"	.625"
D004	1"	.75"
D005	1.25"	1"
D006	1.50"	1.25"
D007	1.75"	1.50"
D008	2"	1.75"
D009	2.25"	2"
D010	2.50"	2.25"
D011	2.75"	2.50"
D012	3"	2.75"
D013	3.25"	3"
D014	3.5"	3.25"

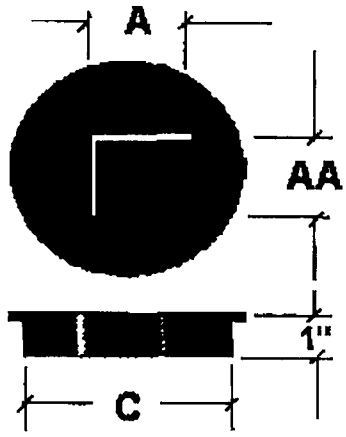


SMALL ROUND ADAPTERS

Part #	Projection O.D. Diameter	A
D301	.375"	.25"
D302	.50"	.375"
D303	.75"	.50"
D304	.875"	.75"







SQUARE TUBE ADAPTERS

Part #	A	AA
D103	3"	3"
D104"	4"	4"

ANGLE IRON ADAPTERS

Part #	A	AA	C
D201	1.75"	1.75"	4"
D206	3"	3"	5.25"
D208	4"	4"	6"
D200	1"	1"	4"

CAD Page

> Next Page >

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Firestone
SPECIALTY PRODUCTS

To: Dave Smith Fax: 574-522-223

Alpha Systems

From: Paul E. Oliveira Date: 7/19/2006

Re: EPDM Pipe Seal with tape Specs ,etc Pages: 21

CC: Mark Munley

☐ Urgent ☑ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Dave,

Attached please find our purchasing specifications for our EPDM Pipe Flashings and QuickSeam Pipe Flashings, Pipe Flashing Clamps and our TPO Pipe Boots.

Please note the physical property and warranty requirements for all of the products including the clamping rings.

I believe this should give you all the information needed to quote and sample Firestone with parts produced by your company.

If you have any questions call me at my office 1-317-575-7186.

Thanks,

Paul

AS HOLDINGS vs. H&C MILCOR
Opposition No. 91182064
Serial No. 76/461,157
Deft. No. 14

ALP00529

4, 35

PRODUCT SPECIFICATION FOR EPDM PIPE FLASHINGS AND QUICKSEAM PIPE FLASHINGS

Prepared By: Bill Wasitis 1/9/04
Bill Wasitis,
Accessory Engineer

Approved By: 1/9/04
Jeff Hehegar,
Accessory and System Engineering Manager

Approved By: 1/2/04
Paul Oliveira,
Accessory Product Manager

ALP00530

Product Specification
For
EPDM Pipe Flashings
And
QuickSeam Pipe Flashings

1.0 Scope

1.1 This specification is for EPDM Pipe Flashings and QuickSeam Pipe Flashings which are to be used in conjunction with Firestone RubberGard® and Triumph Roofing Systems. The EPDM Pipe Flashing is a pre-fabricated pipe boot and the QuickSeam Pipe Flashing is a fabricated pipe boot that has a tape adhesive laminated to the bottom flange. Both boot types are to be used to flash pipes, rods or other similar penetrations on roofs. Both boot types can be used to flash a variety of pipe sizes from 1" O.D. to 6.875" O.D.

2.0 Typical Physical Requirement

2.1 Pipe Flashings (W56-RAC-1033 and-1063) - The pipe flashings shall be made of EPDM. Either Firestone Building Products [redacted] or a Firestone approved alternate compound is acceptable. Any changes to an accepted compound must be submitted in writing to Firestone for approval before making the change.

2.2 QuickSeam Tape Material – For the QuickSeam Pipe Flashing, the tape adhesive shall be [redacted] or an alternate approved by Firestone.

2.3 Primer - The QuickSeam tape shall be adhered to the pipe flashing with QuickPrime Plus or HSSP-1 primer.

2.4 Release Paper – The tape shall be covered with a piece of Firestone approved release paper that extends from the inside edge of the tape to the outside edge. The paper shall have one full-width cut through it for ease of removal during installation.

3.0 Physical Properties

3.1 The QuickSeam Pipe Flashing shall pass the dead load shear test when tested in accordance with the Test Specification W56-358-1002.

3.2 The EPDM compound used for pipe flashings must meet the minimum values as listed in B-1000 on Page 8 of this specification.

4.0 Physical Dimensions

4.1 The pipe flashings shall conform dimensionally to Figure 3 of this specification and the requirements listed in the Quality Assurance Test Form on Page 6 of this specification.

4.2 The QuickSeam tape thickness shall be .030"-.040".

4.3 The QuickSeam tape shall be flush to 1/8" beyond the flange edge.

5.0 First Article Submission and Inspections

5.1 Vendor shall submit to Firestone Technology one complete unit to this specification for First Article Inspection before production will be approved. The submission shall include a filled-out copy of the report form on page 6

ALP00531

of this specification or an alternate form approved by Firestone.

5.2 The vendor shall inspect finished pipe flashings at a frequency that will ensure Firestone receives only parts that meet this specification. A written certification indicating the lot number and test results shall be required with each shipment. Certification forms shall be sent to the attention of the Purchasing Agent.

5.3 Firestone may inspect samples of incoming material to assure that the product meets the requirements of paragraphs 2, 3, and 4.

6.0 Packaging and Marking

6.1 Packaging shall include 10 loose [redacted] with the ten pipe flashings. The clamps shall meet the latest revision for [redacted].

6.2 The box used for packaging shall be approximately [redacted] and for QuickSeam Pipe Flashings shall [redacted] to prevent the tape sticking to the inside of the box.

6.3 Box marking shall be by a label adhered to one side of the box and extending onto the top of the box. The [redacted] in accordance with [redacted] and shall contain the information from Table 2 of the labeling specification. An example of the Firestone label is shown in Figure 1, and the Triumph label in Figure 2. The "WARNING" information should go on the top of the box.

6.4 A date code (month and year) shall be molded on the top surface of the pipe flashing flange.

6.5 A molded-in detail showing where to cut the pipe flashing for the desired pipe O.D. shall be molded on the top surface of the flange.

6.6 A date of packaging and lot number shall be ink stamped on the box for traceability. Size of font shall be 16 minimum.

6.7 The letters "BFDP" and "EPDM" shall be molded on the body of the large diameter as shown by Note 1 in Figure 3. Letters shall be approximately 5/16" high, Arial font. The letter sets shall be centered with each other and spaced approximately ¼" apart. The area containing the letters shall be rectangular unless otherwise approved.

7.0 Warranty

7.1 Supplier shall warrant the workmanship and the integrity of the pipe flashings for a period of 20 years to perform as intended when installed in accordance with manufacturer's specifications.

ALP00532

WARNING:

Do not store on roof in direct sunlight or at temperatures above 80°F (26.7°C). Keep box dry.

Firestone

QuickSeam Pipe Flashing
W56-RAC-1063

1" (2.5 cm) to 6" (15.2 cm) ID
QUANTITY: 10 Flashings and 10 Clamps, and Instruction Sheet

Firestone
BUILDING PRODUCTS

NOBODY COVERS YOU BETTER.®
525 Congressional Blvd.
Carmel, IN 46032-5607

Made in U.S.A.

Figure 1 – Firestone Label

ALP00533

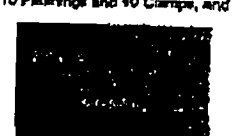
WARNING:

Do not store on roof in direct sunlight or at temperatures above 80°F (26.7°C). Keep box dry.

Triumph

QuickSeam Pipe Flashing
W56-TRP-5761

1" (2.5 cm) to 6" (15.2 cm) ID
QUANTITY: 10 Flashings and 40 Clamps, and Instruction Sheet



[illegible] Label No. 525 Congressional Blvd. Carmel, IN 46032-5607 Made in U.S.A.

Figure 2 – Triumph Label

ALP00534

EPDM PIPE FLASHING AND QUICKSEAM PIPE FLASHING TEST REPORT FORM

Supplier _____ Material _____

Date Assembled _____ By _____

Date Tested _____ Lot # _____

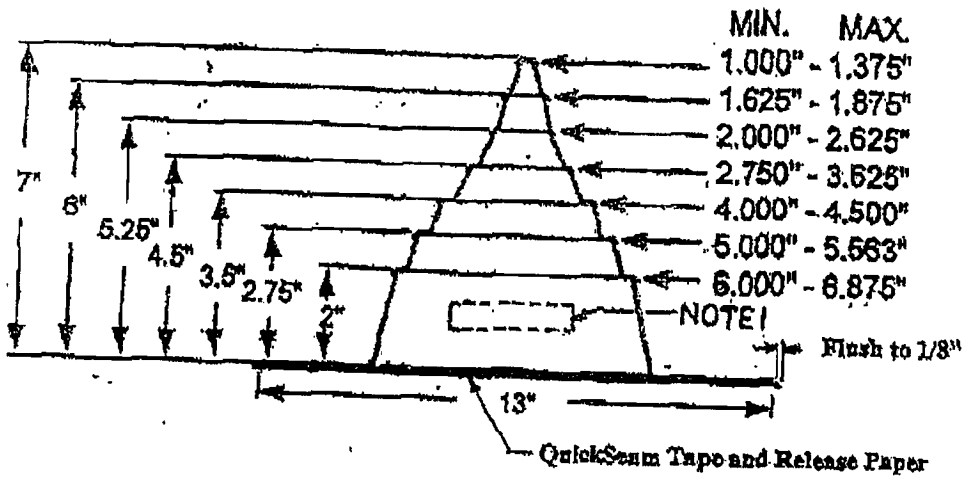
QUALITY ASSURANCE TEST REQUIREMENTS FOR PIPE FLASHINGS

Test		Specification
Base Polymer	_____	100 % EPDM
Color	_____	Black
Shore A Hardness (reading at 3 seconds)	_____	55 - 70
Dimensions (see Figure 3)		
1. (Thickness of flange and wall)	_____	0.055" - 0.075"
2. (Flange OD)	_____	13"
3. (Legibility of date code and all printing on parts)	_____	Paragraph 6.4-6.7
4. (Voids, air traps, splits, pitting, cured in flash, or surface blemishes or blisters)	_____	None
5. (Tensile strength, room temperature)	_____	1400 psi, minimum
6. (Elongation, room temperature)	_____	350%, minimum
7. (Die C tear, room temperature)	_____	190 lbf/in, minimum
8. (Tensile strength, after heat aging)*	_____	1300 psi, minimum
9. (Elongation, after heat aging)*	_____	250%, minimum
10. (Die C tear, after heat aging)*	_____	150 lbf/in, minimum
11. (Durometer, after heat aging)*	_____	80 Shore A, maximum
12. (QuickSeam Dead Load Shear Test) slippage	_____	less than 0.125"
13. (QuickSeam Tape Thickness)	_____	.030"-.040"
14. (QuickSeam Tape beyond flange)	_____	Flush to 1/8"

28 days @ 240F

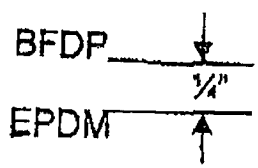
*Perform heat age testing on pipe flashings quarterly and submit data to Firestone.

ALP00535



NOTES:

1. "BFDP" and "EPDM" to be molded and spaced as shown by Detail "A".
2. Tolerance on dimensions shown is ±0.06" unless otherwise noted.
3. Drawing shown is for QuickSeam Pipe Flashing. EPDM Pipe Flashing does not have tape on the flange.



Detail "A"

Figure 3: QuickSeam Pipe Flashing Dimensions

ALP00536

EPDM MATERIAL SPECIFICATIONS
B-1000

PROPERTY	TEST METHOD	PERFORMANCE
Specific Gravity	ASTM D-297	1.15 ± .05
Tensile Strength	ASTM D-412 (Die C)	1400 psi, minimum (9.6 MPa)
Elongation	ASTM D-412 (Die C)	350%, minimum
Tear Resistance	ASTM D-624 (Die C)	190 lbf/in, minimum (33.3 N/mm)
Shore A Durometer	ASTM D-2240	55 - 70
Ozone Resistance 7 days @ 100pphm@ 100°F with 50%extension	ASTM D-1149	No Cracks
Heat Aging 28 days @ 240°F	ASTM D-573	
Tensile Strength	ASTM D-412	1300 psi, minimum (8.9 MPa)
Elongation	ASTM D-412 (Die C)	250%, minimum
Tear Resistance	ASTM D-624 (Die C)	150 lbf/in, minimum (26.3 N/mm)
Shore A Durometer	ASTM D-2240	80 maximum
Brittleness Temperature	ASTM D-2137	-49°F (-45°C)
Resistance to Water change in weight after immersion 7 days @ 158°F, maximum, %	ASTM D-471	+8, -2
Water Vapor Permeability, max., perm mils	ASTM E-96	2.0
Tolerance on Nominal Thickness, %	ASTM D-751	± 10
Pipe Flashing Composition	ASTM D-297	
Weight percent of Polymer that is EPDM, %		100
Weight percent of material that is EPDM Polymer, %		30 minimum

ALP00537

THIS REVISION SUPERSEDES ALL PREVIOUS ISSUES 1.13

PRODUCT SPECIFICATION

FOR

PIPE FLASHING CLAMPS

Prepared By: William A. Wasitis 1/29/03
William A. Wasitis, Project Engineer

Approved By: 1-29-03
Paul Oliveira, Product Manager Accessories

ALP00538

Product Specification
For
Pipe Flashing Clamps

1.0 Scope

1.1 This specification is for Firestone Pipe Flashing Clamps, which are to be used in conjunction with all Firestone Single Ply Roofing Systems. Pipe Flashing Clamps are metal fastening devices used to secure Pipe Flashings, QuickSeam Pipe Flashings and Conduit Flashings to circular roof penetrations, and are expected to perform for the life of the Pipe Flashing.

2.0 Typical Physical Requirement

2.1 Pipe Flashing Clamps shall be of the [redacted] with a closed drive screw.

2.2 Material - [redacted] passivated. The clamps shall be warranted for the intended outside application for 20 years.

3.0 Physical Dimensions

3.1 The width of the clamp band shall be a 9/16" minimum and shall conform to the dimensions as shown in Figure 1 of this specification.

3.2 The clamps supplied under this specification shall have the following clamping ranges and part numbers:

3.2.1 UltraPly TPO and UltraPly 78+ Flashings – 1-1/16" to 4" – [redacted]

3.2.2 UltraPly TPO and UltraPly 78+ Flashings – 3 1/2" to 8 1/2" – [redacted]

3.2.3 Universal and Universal QuickSeam Flashings 1" – 6.875" – [redacted]

3.3.4 Conduit Flashing – ½" – 29/32" – 63008H B
7/8"-2 ¾" – [redacted]

4.0 Inspection

4.1 The Pipe Flashing vendor shall certify that the clamps meet this specification. The certification shall be included with the pipe flashing certification.

4.2 Firestone may inspect samples of incoming material to assure that the product meets the requirements of paragraphs 2.0 and 3.0. Parts not in compliance shall be returned.

ALP00539

5.0 **Packaging and Source of Supply**

5.1 Clamps shall be packaged loose, 10 clamps per carton, except for the Conduit Flashing, which shall have one 3 ¾" x 3" x 6" box of 10 clamps each size (20 total) per carton.

5.2 Approved Source of Supply:

[redacted]

6.0 Warranty

6.1 Clamps approved to this specification shall not be changed without the written approval of Firestone.

6.2 Clamps furnished to this specification shall be free of workmanship and material defects for a period of 20 years.

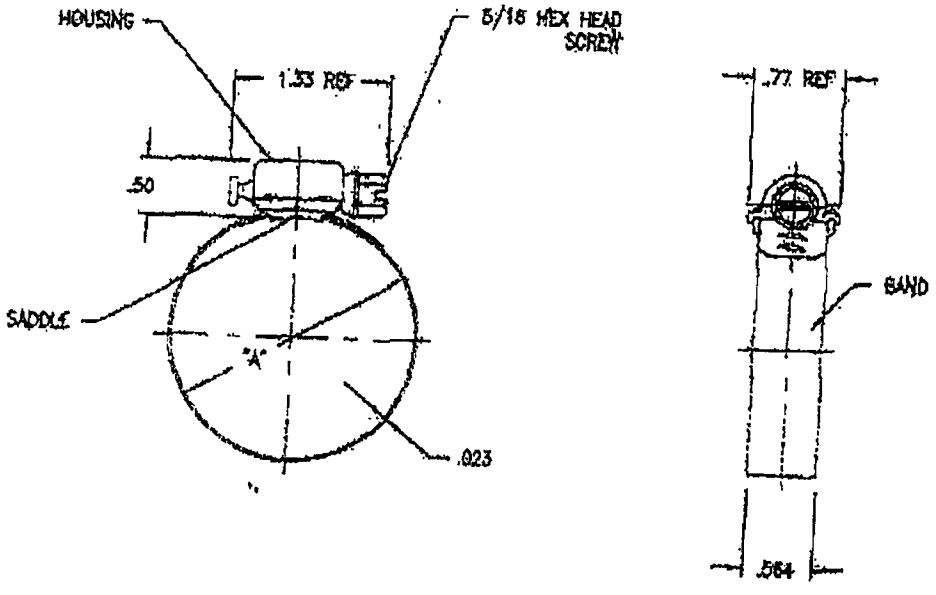


Figure 1: Clamp Dimensions

ALP00540

3.23

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PRODUCT SPECIFICATION

FOR

ULTRAPLY TPO

SMALL AND LARGE PIPE BOOTS

* See note on 1.1

Prepared By: Bill Wasitis 1/29/03
Bill Wasitis, Project Engineer

Approved By: Richard Peng 1/29/03
Richard Peng, Technical Director

Approved By: 1-29-03
Paul Oliveira, Product Manager Accessories

ALP00541

Product Specification
for
UltraPly TPO
Small and Large Pipe Boots

1.0 **Scope**

1.1 This specification is for UltraPly TPO Pipe Boots to be used with Firestone UltraPly TPO Roofing Systems. Base polymer and weatherability of the UltraPly TPO Pipe Boots shall be the same as the UltraPly TPO Unsupported Flashing.

2.0 **Typical Physical Properties**

2.1 Base Polymer: Thermoplastic Polyolefin

2.2 Color: White, Gray or Tan

2.3 Dimensions

a. For Small Pipe Boot refer to Drawing W56-TPO-3012 on Page 8

b. For Large pipe Boot refer to Drawing W56-TPO-3013 on Page 9

2.4 Table I lists other physical properties for the UltraPly TPO Pipe Boots when tested in accordance with the respective ASTM test specification listed.

7/18/06

TABLE I

Physical Properties - Unaged	Test Method	Specification
Thickness	None	as per drawing
Tensile Strength	ASTM D-412	2500 psi (min)
Elongation	ASTM D-412	500% (min)
Tear Resistance	ASTM D-624 (die C)	250 lbs (min)
Low Temperature Brittleness	ASTM D-1790	-40°F or lower
Water weight change	ASTM D-570	4% (max)
Shore A Durometer	ASTM D-2240	80 ±10
Peel Strength	ASTM D-413-82	membrane tear

Physical Properties after Heat Aging 166 hours @ 240°F per ASTM D-573

Physical Properties - Aged	Test Method	Specification
Tensile Strength	ASTM D-412	2250 psi (min)
Elongation	ASTM D-412	450% (min)
Tear Resistance	ASTM D-624 (die C)	225 lbs (min)

ALP00542

2.5 Clamps: [redacted] purchased from [redacted], Saltsburg, PA, 15681-9594. Refer to Firestone Specification FBP-6090 for clamp details.

- Large Pipe Boot Clamp – [redacted]
- Small Pipe Boot Clamp – [redacted]

3.0 **Qualification Tests and First Article Inspection**

3.1 Firestone shall conduct a series of qualification tests on each vendor's product. Successful passing of these tests shall qualify a vendor's product for use by Firestone. In addition, Firestone shall conduct such qualifications tests in-house as required to assure that a vendor's product continues to meet this product specification.

3.2 The qualification tests shall consist of the following as a minimum:

a. Tensile Strength per ASTM D-412
b. Elongation per ASTM D-412
c. Shore A Durometer per ASTM D-2240
d. Low Temperature Brittleness per ASTM D-1790
e. Peel Strength per ASTM D-413-82 conducted on 1" strip from the base flange of the UltraPly TPO Pipe Boot which is heat welded to Firestone UltraPly TPO membrane. Machine test speed shall be 2" per minute, 180° peel.

3.3 Prior to production vendor shall submit a complete unit for First Article Inspection by Firestone. The unit shall be representative of the final product, including the carton, label, marking, boots and clamps, unless otherwise specified by Firestone.

4.0 **Quality Assurance Tests**

4.1 Quality Assurance Tests listed in Table II shall be performed as a minimum by Firestone.

TABLE II

Physical Property	Test Method	Specification
Thickness	none	as per drawing
Tensile Strength	ASTM D-412	2500 psi (min)
Elongation	ASTM D-412	500% (min)
Tear Resistance	ASTM D-624 (die C)	250 lbs (min)
Dimensions	ASTM D-751	as per drawing

ALP00543

5.0 Inspection

5.1 Unless otherwise specified in the purchase order, a certificate of compliance to this specification will be accepted for individual lot shipments in lieu of actual test values.

5.2 Firestone shall inspect samples of incoming material to assure that the product meets the requirements of section 4.0, Quality Assurance Tests.

6.0 Reporting

6.1 All numeric data generated shall be recorded on the form provided in this specification or a certificate of compliance generated by the supplier and approved by Firestone.

6.2 One report form shall be used for each UltraPly TPO Pipe Boot tested. All test samples shall be retained for 30 days after testing.

7.0 Packaging and Marking

7.1 Packaging shall consist of 10 boots and 10 clamps per container. [redacted] inside. The clamps shall be placed on the inside of the pipe boot stack inside the carton.

7.2 Marking shall be a hot stamp on the flange of the UltraPly TPO Pipe Boot with the Firestone "Shield" and "TPO" in PMS -185 Red.

7.3 The mold form number shall be metal stamped 1/8" nominal height so that the number is visible on the top of the flange in one place.

7.4 Each package shall have a Firestone Type 1 Label attached with the information shown in Table III. Label Numbers assigned boots to this specification are as follows:

- TPO Small Pipe Boot – Label No. 4
- TPO Large Pipe Boot – Label No. 5
- TPO Gray Small Pipe Boot – Label No. 9
- TPO Gray Large Pipe Boot – Label No. 10
- TPO Tan Small Pipe Boot – Label No. 11
- TPO Tan Large Pipe Boot – Label No. 12

7.5 Each package shall have a lot identification number either on a separate label adhered to the outside of the container or printed on the container a minimum size, 16 font.

8.0 WARRANTY.

8.1 SUPPLIER SHALL WARRANT THE WORKMANSHIP AND INTEGRITY OF THE PIPE FLASHING FOR A PERIOD OF 20 YEARS TO PERFORM AS INTENDED WHEN INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

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Table III - Type 1 Label

Required Field	Firestone Logo in Red (size 48), PMS-185
Required Field	Product Name and Color in parenthesis (other than white or black) first line, (Arial, 48, Black), second line (Arial, 44, Black)
Required Field	Product Number (Arial, 44, Black)
Required Field	Quantity (Arial, 12, Black)
Optional Field	Instructions (Arial, 12, Black)
Required Field	Building Products Logo (12, Red Firestone only)
Required Field	Nobody Covers You Better Logo (Arial, 10, Black)
Required Field	Address (Arial, 10, Black)
Required Field	Label Design Date and No. (left side), (Arial, 6, Black)
Required Field	Made in U.S.A. (right side), (Arial, 10 Bold, Black)

Example Type 1 Label (not to size)

Firestone

UltraPly TPO - Gray
Molded Pipe Boots (Large)
W56-TPO-G013

Quantity: 10 Boots & 10 Clamps
Fits 4" (101.6mm) to 8" (203.2mm) Outside Diameters

Firestone
BUILDING PRODUCTS

NOBODY COVERS YOU BETTER ®
526 Congressional Blvd.
Carmel, IN 46032-5697

Made in U.S.A.

ALP00545

UltraPly TPO
Small and Large Pipe Boot
Qualification Test Report Form

Supplier _____ Material _____
Date tested _____ Tested by _____

QUALIFICATION TESTS

Unaged Physical Properties	Sample 1	Sample 2	Accepted Value
Thickness			as per drawing
Dimensions			as per drawing
Tensile strength			2500 psi (min)
Elongation			500% (min)
Tear resistance			250 lbs (min)
Low temperature brittleness			-40°F or lower
Water weight change			4% (max)
Shore A durometer			80 ±10
Peel strength			membrane tear

Physical Properties after Heat Aging 166 hours @ 240°F per ASTM D-573

Aged Physical Properties	Sample 1	Sample 2	Accepted Value
Tensile Strength			2250 psi (min)
Elongation			450% (min)
Tear Resistance			225 lbs (min)

ALP00546

UltraPly TPO
Small and Large Pipe Boot
Quality Assurance Test Report Form

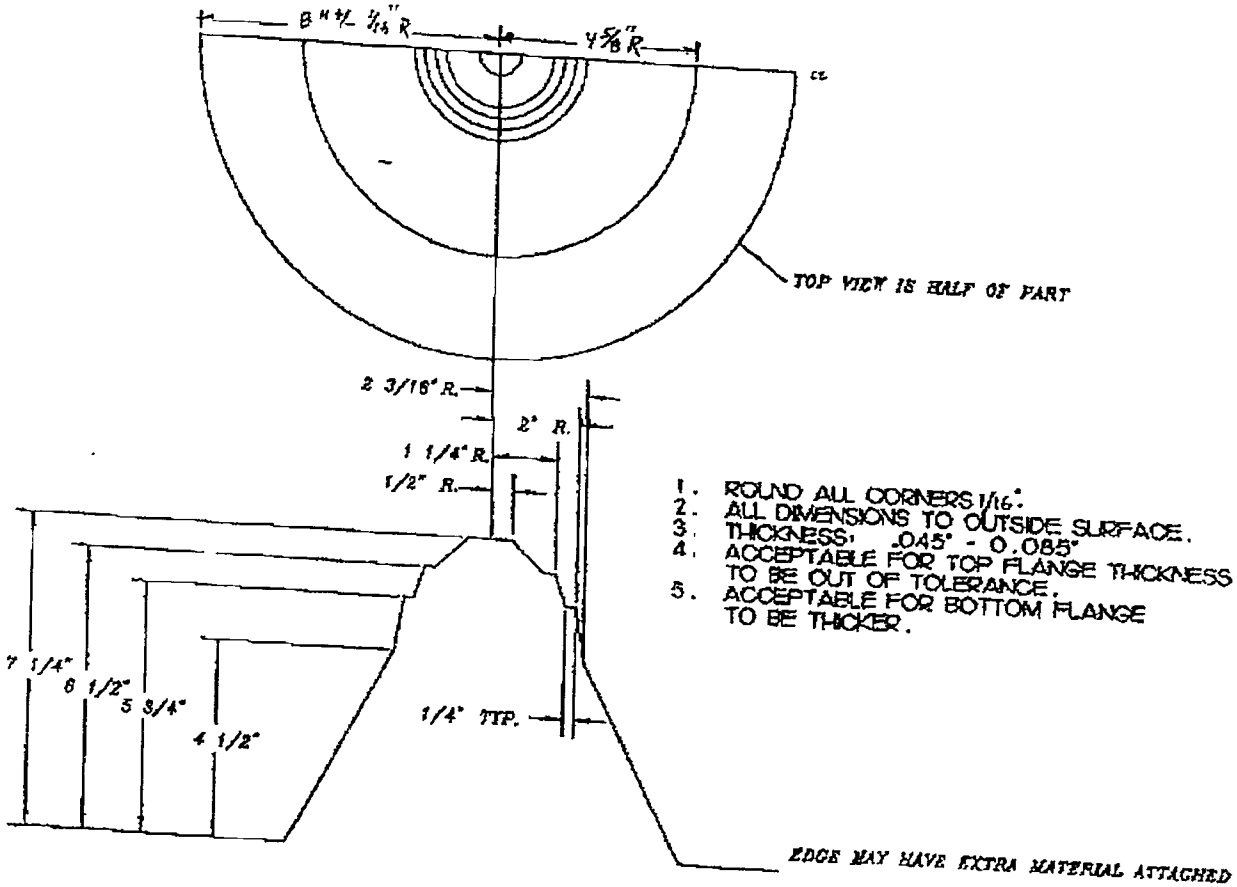
Supplier _____ Material _____
Date tested _____ Tested by _____

PHYSICAL REQUIREMENTS

Unaged Physical Properties	Sample 1	Sample 2	Accepted Value
Thickness			as per drawing
Dimensions			as per drawing
Tensile strength			2500 psi (min)
Elongation			500% (min)
Tear resistance			250 lbs (min)

AL-00547

ALP00548



1. ROUND ALL CORNERS 1/16".
2. ALL DIMENSIONS TO OUTSIDE SURFACE.
3. THICKNESS: .045" - 0.085"
4. ACCEPTABLE FOR TOP FLANGE THICKNESS TO BE OUT OF TOLERANCE.
5. ACCEPTABLE FOR BOTTOM FLANGE TO BE THICKER.

NOTES:
1. ROUND ALL CORNERS
2. ALL DIMENSIONS TO OUTSIDE SURFACE.
3. THICKNESS: .045" - .085"
4. ACCEPTABLE FOR TOP FLANGE THICKNESS TO BE OUT OF TOLERANCE.
5. ACCEPTABLE FOR BOTTOM FLANGE TO BE THICKER.

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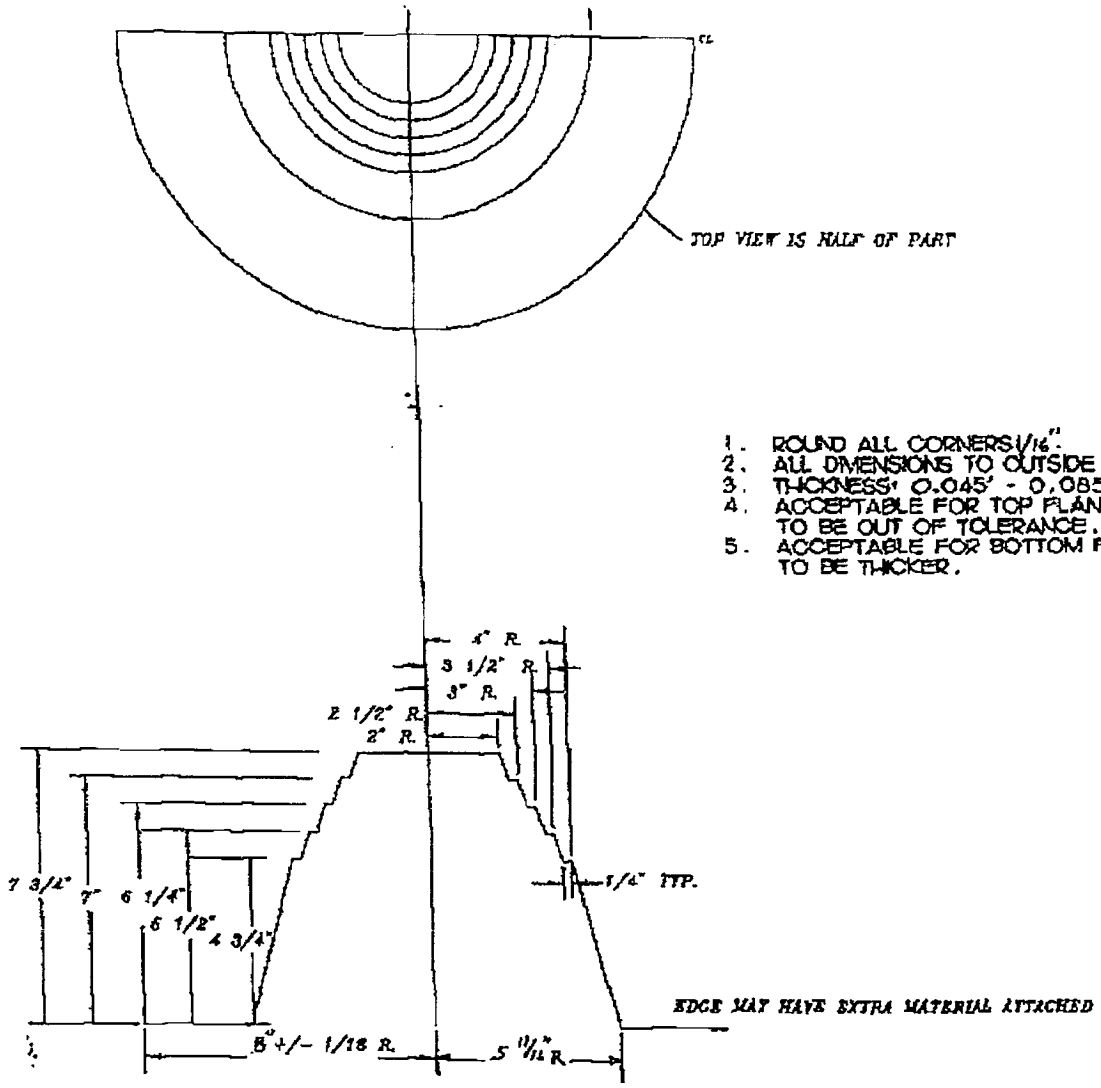
ULTRAFLY TPO SMALL PIPE BOOT

W56-TPO-3012



1. ROUND ALL CORNERS 1/16".
2. ALL DIMENSIONS TO OUTSIDE SURFACE.
3. THICKNESS: 0.045' - 0.085'
4. ACCEPTABLE FOR TOP FLANGE THICKNESS TO BE OUT OF TOLERANCE.
5. ACCEPTABLE FOR BOTTOM FLANGE TO BE THICKER.

NOTES:
1. ROUND ALL CORNERS
2. ALL DIMENSIONS TO OUTSIDE SURFACE.
3. THICKNESS; .045" - .085"
4. ACCEPTABLE FOR TOP FLANGE THICKNESS TO BE OUT OF TOLERANCE.
5. ACCEPTABLE FOR BOTTOM FLANGE TO BE THICKER.

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ULTRAPLY TPO LARGE PIPE BOOT

W56-TPO-3013

W56-TPO-3012, -3013
Issued November 12, 1998
Revised January 28, 2003
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