

Model RIS

ALL FUEL, INSULATED CHIMNEY SYSTEM 10" - 24"



Model RIS Technical Information

Certification

Model RIS is tested and listed by Intertek Testing Services to the following standard:

UL 103HT – The standard for chimneys on gas, liquid and solid fuel-fired appliances in the USA.

CAN/ULC-S604 – The standard for chimneys on gas and liquid fuel-fired appliances in Canada.

CAN/ULC-S610 – The standard for solid fuel Factory-Built Fireplaces in Canada.

Applications

RIS chimney is suitable for use on appliances that burn:

- Wood
- Oil
- Coal
- Natural or LP Gas
- Charcoal

Model RIS is certified to vent wood burning stoves, fireplaces and residential furnaces. In addition, there are a number of RIS components specifically designed and certified to vent large open masonry fireplaces burning wood and/or gas. There are also specific components designed to extend masonry chimneys and repair earthquake damaged masonry chimneys.

Note for customers in Canada: RIS chimney is not certified to the CAN/ULC-S629 standard but is certified to CAN/ULC-S610 in combination with some solid fuel appliances (e.g. Renaissance Fireplaces). Only install RIS on wood fireplaces certified to CAN/ULC-S610 in combination with RIS or contact the appropriate authorities for approval, beforehand. ICC can provide complete engineering services (sizing, material selection, installation recommendations, drawings etc.) to assist you in obtaining approval. However, we can not guarantee that it will be accepted in all cases. If you have a large fireplace project you would like to quote on please be sure to contact us in advance so we can work with your local engineer, architect and building authority.

Allowable Flue Gas Temperatures

Max Continuous	540°C (1000°F)
Brief Forced Firing	760°C (1400°F)
Tested To	1150°C (2100°F)

Clearance to Combustible Materials

Model RIS is certified for 2" clearance to combustible materials.

Construction

Flue: .018" - .025", stainless steel.

Casing*: .018" - .025", stainless steel or .018" - .025" galvalume steel.

Seam: Interior and exterior seams are continuous seam welded.

Insulation: Thermoplus continuous blanket.

Wall thickness: 1"

See page 81 of this catalog for recommended chimney sizing for masonry fireplaces.

Note: There are some components of RIS chimney that are available in 10" and 12" diameter only. Some of these parts are designed for specific fireplaces which are not described in the catalog.

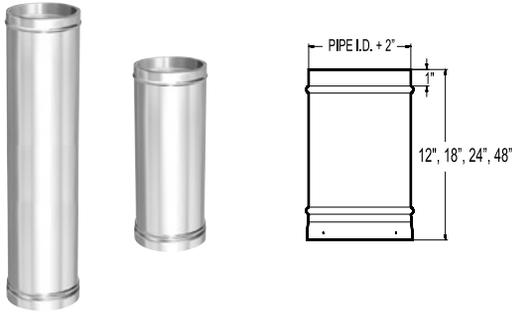
* See Lengths (RIL), for types of stainless steel by diameter.



Model RIS has been tested and listed to the UL 103HT chimney standards by INTERTEK.

Model RIS Product Descriptions

Lengths (RIL)

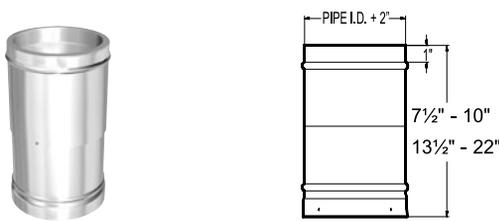


RIS is available in 12", 18", 24" and 48" lengths. Deduct 1 1/2" from overall length to determine the actual installed dimension.

Diameters 10" – 14" have a 430 stainless steel exterior like EXCEL.

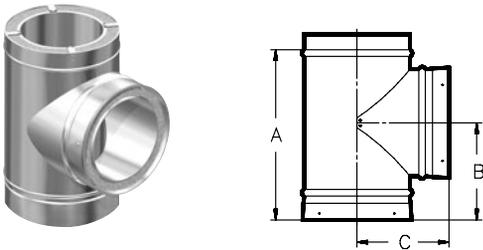
Diameters 16" – 24" have either a galvalume or 304 stainless steel exterior.

Adjustable Lengths (RILA)



12" and 24" adjustable lengths are available. The 12" can be adjusted from 7 1/2 to 10". The 24" can be adjusted from 13 1/2 to 22". Deduct 1 1/2" from overall length to determine the actual installed length. *Note: Adjustable lengths must be installed above a fixed length or they will not work. They should not be installed immediately above a round or square support, tee or elbow.*

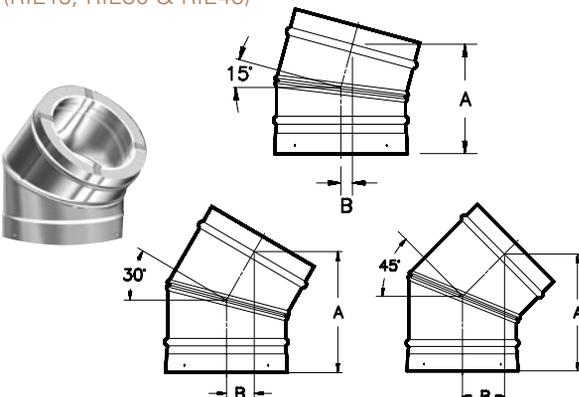
Insulated Tees (RIT)



Designed to connect horizontal and vertical lengths of the chimney. Does not include a tee cap (RITC).

INCHES			
Dimensions			
PIPE I.D.	A	B	C
10	16 3/4	9	9
12	18 3/4	10	10
14	20 3/4	11	11
16	22 3/4	12	12
18	24 3/4	13	13
20	26 3/4	14	14
22	28 3/4	15	15
24	30 3/4	16	16

Elbows (RIE15, RIE30 & RIE45)

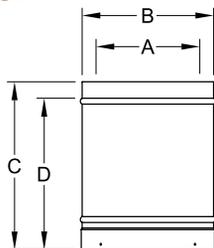


Used when a directional change is required. *Note: 45° elbows are approved for use in Canada only.*

INCHES						
Dimensions						
PIPE I.D.	15°		30°		45° CANADA ONLY	
	A	B	A	B	A	B
10	6 7/8	3/4	8 1/2	1 7/8	9 3/8	2 3/4
12	7 3/8	7/8	9	2	10	3 1/4
14	7 7/8	7/8	9 1/2	2 1/8	10 3/4	3 3/4
16	8 3/8	1	10	2 1/4	11 1/2	4 1/4
18	8 7/8	1	10 1/2	2 1/2	12 1/4	4 5/8
20	9 3/8	1 1/8	11	2 5/8	12 7/8	5 1/8
22	9 7/8	1 1/8	11 1/2	2 3/4	13 1/2	5 5/8
24	10 3/8	1 1/4	12	2 7/8	14 1/4	6

Chimney Top Damper

(RCTD)



Currently available in 10" to 16" diameter only. Adding this "Top Damper" to a system seals it right at the top of the chimney. The "Chimney Top Damper" is placed directly below the cap and is designed to prevent any cold air infiltration into the house through the chimney. It functions on a chain that hangs down to the firebox and comes with 30 feet of cable.

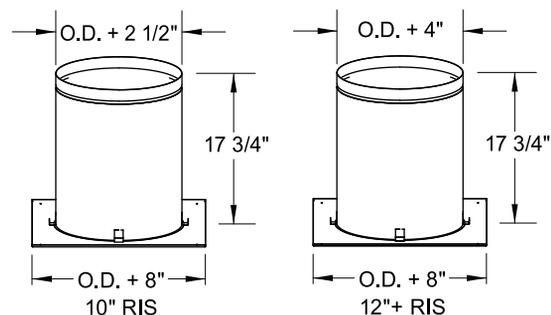
INCHES

Dimensions				
Code	A	B	C	D
10RCTD	10	12	12	10 1/4
12RCTD	12	14	12	10 1/4

Radiation Shield

(RRS)

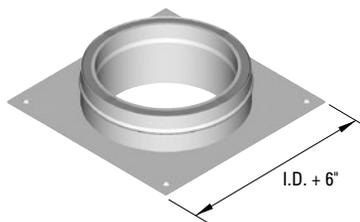
Used when the chimney passes through a combustible floor or ceiling. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.



Anchor Plate

(RAP)

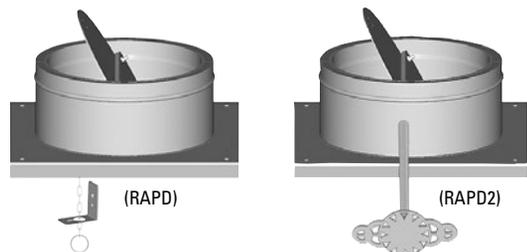
Is used to connect an appliance (such as a masonry fireplace or heater) to an RIS chimney.



Anchor Plate Damper

(RAPD, RAPD2)

Combines the anchor plate with a heavy gauge stainless steel damper. The RAPD simplifies masonry fireplace construction, reduces installation cost and provides a superior seal. The RAPD comes with 6' stainless steel cable.



Rain Caps

(RRC, RDRC)

The RIS rain cap is constructed entirely of stainless steel. It is designed to provide good protection from wind and rain while being a small size and a low profile. The Deluxe Rain Cap is available in 10" and 12" diameters. An optional wind/rain shield is available in 10" - 24" diameter. An optional spark screen is available for installations where sparks can pose a safety problem.



Note: We do not recommend the use of untested, unlisted rain caps or shrouds. In some cases it is possible to create an unsafe installation simply by using an aftermarket shroud. If you choose to do so you must terminate the chimney with an ICC Rain Cap Base (RRCB). The RRCB closes off the top of the chimney to prevent moisture from entering the insulation.

INCHES

Rain Caps Dimensions		
PIPE I.D.	A	B
10	17	5
12	20 1/4	6
14	23 3/4	7
16	27 1/4	8
18	30 5/8	9
20	34	10
22	37 3/8	11
24	40 3/4	12

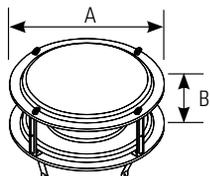
Spark Screen

(RRCFS)

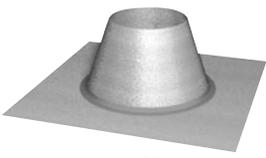


Rain Cap Base

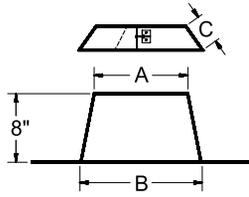
(RRCB)



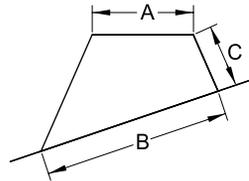
Roof Flashings



RF



RFA, RFB

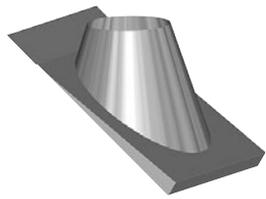


(RF, RFA & RFB) Used to provide weather protection where the chimney penetrates the roof. Three models are available to accommodate various roof pitches. The storm collar (RSC) is included.

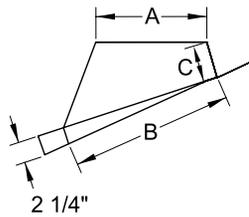
(RMFA, RMFB, RMFC) These flashings are specifically designed for metal roofs and greatly simplify metal roof installations. They are made from galvalume steel only.

(RSF, RSFA, RSFB) Stainless steel flashings are available in 10" and 12" diameters. Dimensions are the same as standard flashings.

(RF) Roof Flashings (comes with RSC storm collar)						
Pitch	Flue I.D.	Code	Base W x L	A	B	C
Flat - 2/12	10"	10RF/10RSF	26 x 26	12 1/2	16 3/4	8
	12"	12RF/12RSF	28 x 28	14 1/2	18 3/4	8
	14"	14RF	30 x 30	16 1/2	20 3/4	8
	16"	16RF	32 x 32	18 1/2	22 3/4	8
	18"	18RF	34 x 34	20 1/2	24 3/4	8
	20"	20RF	36 x 36	22 1/2	26 3/4	8
	22"	22RF	38 x 38	24 1/2	28 3/4	8
	24"	24RF	40 x 40	26 1/2	30 3/4	8
1/12 - 7/12	10"	10RFA/10RSFA	31 x 31	12 1/2	20 3/4	11
	12"	12RFA/12RSFA	34 x 36	14 1/2	26 11/16	8 3/4
	14"	14RFA	36 x 36	16 1/2	25 3/16	11
	16"	16RFA	38 x 38	18 1/2	27 1/2	11
	18"	18RFA	41 x 41	20 1/2	29 3/4	11
	20"	20RFA	43 x 43	22 1/2	32 1/16	11
	22"	22RFA	45 x 45	24 1/2	34 5/16	11
	24"	24RFA	47 x 47	26 1/2	36 5/8	11
8/12 - 12/12	10"	10RFB/10RSFB	29 x 35	12 1/2	18 1/2	11
	12"	12RFB/12RSFB	34 x 40	14 1/2	31 1/2	8 5/16
	14"	14RFB	34 x 42	16 1/2	23 1/16	11
	16"	16RFB	36 x 44	18 1/2	25 3/8	11
	18"	18RFB	38 x 48	20 1/2	27 3/4	11
	20"	20RFB	41 x 50	22 1/2	29 15/16	11
	22"	22RFB	43 x 54	24 1/2	32 3/16	11
	24"	24RFB	45 x 56	26 1/2	34 1/2	11

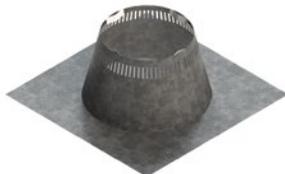


RMFA, RMFB, RMFC
Metal Roof Flashing
US Patent #7114301
Can Patent #2460044

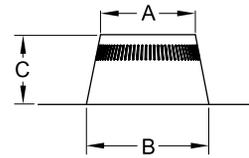


(RMF) Metal Roof Flashing Dimensions (comes with RSC storm collar)						
Pitch	Flue I.D.	Code	Base W x L	A	B	C
3/12 - 7/12	10"	10RMFA	25 1/2" x 25 3/4"	12 1/4	17 13/16	4
	12"	12RMFA	34 x 35 1/2"	14 1/4	26 13/16	4
8/12 - 12/12	10"	10RMFB	29 1/16" x 29 15/16"	12 1/4	22 31/32	4
	12"	12RMFB	34 1/4 x 38 7/8"	14 1/4	31 9/16	4
12/12 - 21/12	10"	10RMFC	27 1/2 x 42 3/4"	12 1/4	30 3/4	7 7/8
	12"	12RMFC	27 1/2 x 46 1/2"	14 1/4	38	7 3/4

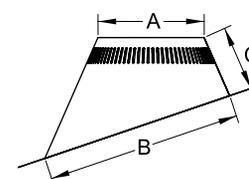
* indicates the direction which 4 1/2" of metal flashing slides under the metal roof sheeting



RVF



RVFA, RVFB



(RVF) Vented Flashing Dimensions (comes with RVSC storm collar)						
Pitch	Flue I.D.	Code	Base W x L	A	B	C
Flat - 2/12	10"	10RVF	28 x 28	13 1/4	18 1/4	10 1/2
	12"	12RVF	30 x 30	15 1/4	20 1/4	10 1/2
1/12 - 7/12	10"	10RVFA	32 x 34	13 1/4	23 3/16	8 7/8
	12"	12RVFA	34 x 36	15 1/4	27 7/8	9 1/16
8/12 - 12/12	10"	10RVFB	32 x 40	13 1/4	28 11/16	6
	12"	12RVFB	34 x 42	15 1/4	31 15/16	6

Vented flashings are required in certain applications where additional airflow is required.

Wall Support

(RWS, RWSG)

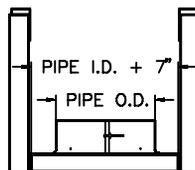


RWS for 10" & 12" diameters



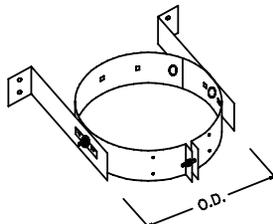
RWS & RWSG for all other diameters

Designed to support a vertical chimney on a wall. There are two styles of wall support, one for 10" & 12" diameter RIS and one for all other diameters.



Wall Band

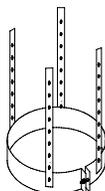
(RWB)



Used on vertical or horizontal runs of chimney to stabilize the chimney. The maximum distance between wall bands is 8'.

Offset Support

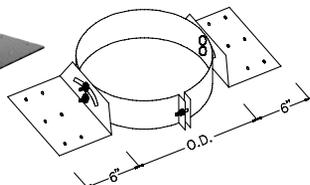
(ROS)



The offset support is primarily used to re-support the chimney above an offset. However it may also be used to provide additional support when the chimney height exceeds the capacity of the primary support.

Roof Support

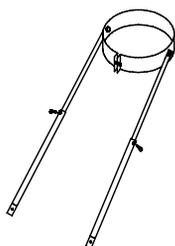
(RSR)



The roof support easily adjusts to any roof pitch. It can be used above an offset or to provide additional support and stability at the roof level.

Roof Brace

(RRB)



Designed to provide a lateral support for the chimney above a roof. The roof brace must be fastened solidly into a structural member.

Flue Extension

(REX)



The flue extension fastens to the bottom of the first chimney length with three screws. It makes it possible to connect a stove pipe, or other type of connector, to the chimney. It is sometimes used to connect an EXCEL chimney directly to an appliance. The flue extension is designed to fit a variety of stove pipes. However, due to variations from one manufacturer to another, some modifications may be required in the field.

Locking Band (RSLB & RGLB)



All RIS insulated components are designed to be fastened together with the stainless steel screws provided with each part. In some cases, it may be desirable to install a locking band for aesthetic purposes. The locking band is designed to overlap the two beads immediately above and below the chimney joint and fastens with a 1/4" bolt. All screws are required even when the locking band is installed. Available in stainless steel and galvalume.



Components for Renaissance Fireplaces

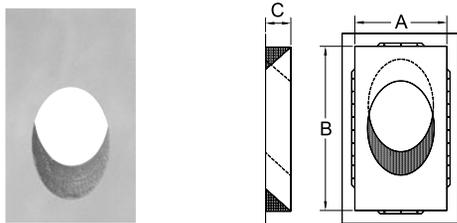
Roof Top Shield (RTS)



The Roof Top Shield is required for Renaissance Fireplace installations. Designed to protect combustible roofs where the chimney passes through, it has adjustable mounting brackets that raise or lower the shield depending on the roof pitch. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.

Dimensions		INCHES
\varnothing	A	
10"	13 7/8	
12"	16 1/2	

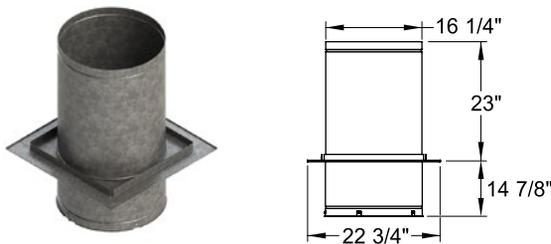
Insulated Angled Wall Radiation Shields (RWRSI30 & RWRSI45)



The insulated angled wall radiation shield is used when the chimney goes through a combustible exterior wall, with a 30° or 45° angle. A radiation shield is installed on the exterior side of the wall to complete the installation. This part is used for fireplace installations only. *Note: 45° are approved for use in Canada only.*

Required Opening Dimensions							INCHES
Angle	30°			45°			
	\varnothing	A	B	A	B	C	
10"	15 5/8	46 3/8	15 5/8	31 1/2	4"		
12"	16 5/8	51 13/32	16 5/8	33 7/8	6"		

Rumford 1500 12" Radiation Shield (12RRS2)



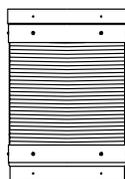
This radiation shield is required for installations of the Renaissance Rumford 1500B fireplace. No other radiation shield is certified with the Rumford 1500B. A radiation shield MUST be installed for each floor the chimney passes through. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.

Components for Renaissance Fireplaces



Flexible Radiation Shield Tube

(12RRSF)

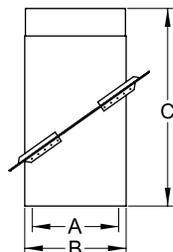


For Canada only. A flexible radiation shield tube (RM-12RRSF) must be installed around the chimney when it is enclosed in Rumford 1500 installations. This includes an outside chase. In the fireplace enclosure the flexible radiation shield tube is not required. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.

Dimensions			INCHES
Chimney	Inside diameter	Max. Length	
12" Ø	14 3/4	84	

Cathedral Ceiling Radiation Shields

(RRSC)

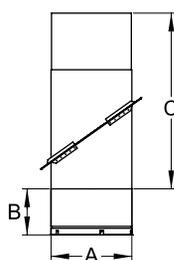


Designed to simplify installations through cathedral ceilings, our RIS Cathedral Ceiling Radiation Shields are fireplace certified specifically for Renaissance units. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.

Dimensions					INCHES
Code	A	B	C MIN.	B MAX.	
10RM-RRSC	12 3/8	14 1/2	24	36	
12RM-RRSC	14 3/8	16 1/2	24	36	

Attic Cathedral Ceiling Radiation Shield

(RM-12RRSCA)

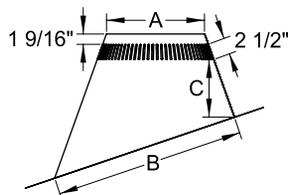


For Canada only - specific to the Rumford 1500. Similar to the Attic Radiation Shield for Cathedral Ceiling (ERSCA). Only, this component is designed for Renaissance Rumford 1500 installations where insulated chimney passes through a cathedral ceiling. The RRSCA has a flange at its base to connect a Radiation Shield Tube. Radiation Shields do NOT reduce chimney clearance. Always maintain 2" clearance to chimney through radiation shields.

Dimensions					INCHES
Code	A	B	C MIN.	B MAX.	
12RM-RRSCA	16 1/2	9 1/4	24	36	

Canadian vented flashing for Rumford 1500 Fireplace

(RCVF)



For Canada only. Includes a storm collar (RVSC).

(RCVF) Canadian Vented Flashing for Rumford 1500 Fireplace							INCHES
Pitch	Flue I.D.	Code	Base W x L	A	B	C	
Flat-2/12	12	RCVF	35 x 35	15 1/4	18	11 3/16	
1/12-7/12	12	RCVFA	37 x 39	15 1/4	27 5/8	8 13/16	
8/12-12/12	12	RCVFB	34 x 42	15 1/4	32 1/4	6	

Model RIS Offset Tables

RIS Offset Table 10 to 16 inches						
LENGTH BETWEEN ELBOWS	2 X 15°		2 X 30°		2 X 45°	
	RISE	OFFSET	RISE	OFFSET	RISE	OFFSET
10 INCH Ø						
NO LENGTH	11 7/8	1 5/8	14 1/8	3 3/4	15 7/8	6 5/8
12" Length	22 1/4	4 3/8	23 3/8	9 1/8	23 1/2	14 1/8
24" Length	33 7/8	7 1/2	33 3/4	15 1/8	32	22 5/8
48" Length	57	13 5/8	54 5/8	27 1/8	48 7/8	39 5/8
48" + 12"	67 3/8	16 1/2	63 7/8	32 1/2	56 1/2	47 1/4
48" + 24"	79	19 1/2	74 1/4	38 1/2	65	55 3/4
48"+24"+12"	89 3/8	22 3/8	83 5/8	43 7/8	72 5/8	63 3/8
48" + 48"	102 1/4	25 3/4	95	50 1/2	82	72 3/4
12 INCH Ø						
NO LENGTH	11 7/8	1 5/8	15	4	17 1/8	7 1/8
12" Length	22 1/4	4 3/8	24 3/8	9 3/8	24 3/4	14 3/4
24" Length	33 7/8	7 1/2	34 3/4	15 3/8	33 1/4	23 1/4
48" Length	57	13 5/8	55 1/2	27 3/8	50 1/4	40 1/8
48" + 12"	67 3/8	16 1/2	64 7/8	32 3/4	57 7/8	47 3/4
48" + 24"	79	19 1/2	75 1/4	38 3/4	66 1/4	56 1/4
48"+24"+12"	89 3/8	22 3/8	84 1/2	44 1/8	73 7/8	63 7/8
48" + 48"	102 1/4	25 3/4	96	50 3/4	83 1/4	73 1/4
14 INCH Ø						
NO LENGTH	12 7/8	1 3/4	16	4 1/4	18 7/8	7 3/4
12" Length	23 1/4	4 1/2	25 1/4	9 5/8	26 1/2	15 3/8
24" Length	34 7/8	7 5/8	35 5/8	15 5/8	35	23 7/8
48" Length	58	13 3/4	56 1/2	27 5/8	51 7/8	40 7/8
48" + 12"	68 3/8	16 5/8	65 3/4	33	59 1/2	48 1/2
48" + 24"	80	19 5/8	76 1/8	39	68	57
48"+24"+12"	90 3/8	22 1/2	85 1/2	44 3/8	75 5/8	64 1/2
48" + 48"	103 1/8	25 7/8	96 5/8	51	85	73 7/8
16 INCH Ø						
NO LENGTH	12 7/8	1 3/4	16 7/8	4 1/2	20 1/8	8 3/8
12" Length	23 1/4	4 1/2	26 1/4	9 7/8	27 3/4	16
24" Length	34 7/8	7 5/8	36 5/8	15 7/8	36 1/4	24 3/8
48" Length	58	13 3/4	57 3/8	27 7/8	53 1/4	41 3/8
48" + 12"	68 3/8	16 5/8	66 5/8	33 1/4	60 3/4	49
48" + 24"	80	19 5/8	77 1/8	39 1/4	69 1/4	57 1/2
48"+24"+12"	90 3/8	22 1/2	86 3/8	44 5/8	76 7/8	65 1/8
48" + 48"	103 1/8	25 7/8	97 7/8	51 1/4	86 1/4	74 1/2

All measurements are in inches

RIS Offset Table 18 to 24 inches						
LENGTH BETWEEN ELBOWS	2 X 15°		2 X 30°		2 X 45°	
	RISE	OFFSET	RISE	OFFSET	RISE	OFFSET
18 INCH Ø						
NO LENGTH	13 7/8	1 7/8	17 7/8	4 3/4	21 3/8	8 7/8
12" Length	24 1/4	4 5/8	27 1/8	10 1/8	29	16 1/2
24" Length	35 7/8	7 3/4	37 1/2	16 1/8	37 1/2	25
48" Length	59	13 7/8	58 1/4	28 1/8	54 1/8	41 7/8
48" + 12"	69 3/8	16 3/4	67 5/8	33 1/2	62 1/8	49 1/2
48" + 24"	81	19 3/4	78	39 1/2	70 5/8	58
48"+24"+12"	91 3/8	22 5/8	87 3/8	44 7/8	78 1/8	65 5/8
48" + 48"	104 1/8	26	98 3/4	51 1/2	87 1/2	75
20 INCH Ø						
NO LENGTH	13 7/8	1 7/8	19 1/4	5 1/8	23 1/8	9 5/8
12" Length	24 1/4	4 5/8	28 1/2	10 1/2	30 3/4	17 1/8
24" Length	35 7/8	7 3/4	38 7/8	16 1/2	39 1/8	25 5/8
48" Length	59	13 7/8	59 3/4	28 1/2	56 1/4	42 5/8
48" + 12"	69 3/8	16 3/4	69	33 7/8	63 3/4	50 1/4
48" + 24"	81	19 3/4	79 3/8	39 7/8	72 1/4	58 3/4
48"+24"+12"	91 3/8	22 5/8	88 3/4	45 1/4	79 7/8	66 3/8
48" + 48"	104 1/8	26	100 1/8	51 7/8	89 1/4	75 3/4
22 INCH Ø						
NO LENGTH	14 7/8	2	20 1/8	5 3/8	24	9 7/8
12" Length	25 1/4	4 3/4	29 1/2	10 3/4	31 5/8	17 1/2
24" Length	36 7/8	7 7/8	39 7/8	16 3/4	40 1/8	26
48" Length	60	14	60 5/8	28 3/4	57	43
48" + 12"	70 3/8	16 7/8	70	34 1/8	64 5/8	50 5/8
48" + 24"	82	20	80 3/8	40 1/8	73 1/8	59 1/8
48"+24"+12"	92 3/8	22 3/4	89 5/8	45 1/2	80 3/4	66 5/8
48" + 48"	105 1/8	26 1/8	101 1/8	52 1/8	90 1/8	76
24 INCH Ø						
NO LENGTH	14 7/8	2	21 1/8	5 5/8	25 3/4	10 5/8
12" Length	25 1/4	4 3/4	30 3/8	11	33 1/4	18 1/4
24" Length	36 7/8	7 7/8	40 3/4	17	41 3/4	26 3/4
48" Length	60	14	61 5/8	29	58 3/4	43 3/4
48" + 12"	70 3/8	16 7/8	70 7/8	34 3/8	66 3/8	51 1/4
48" + 24"	82	20	81 1/4	40 3/8	74 7/8	59 3/4
48"+24"+12"	92 3/8	22 3/4	90 5/8	45 3/4	82 1/2	67 3/8
48" + 48"	105 1/8	26 1/8	102	52 3/8	91 3/4	76 3/4

All measurements are in inches