



METAL END SECTIONS FOR CONC. OR METAL CIRCULAR PIPE	PIPE DIA. (IN.)	MIN. THICK. IN INCHES	DIMENSIONS				L DIMENSIONS ^①						CONCRETE	CONC. OR METAL CIRCULAR PIPE
			A	H	W	OVERALL WIDTH	SLOPE	LENGTH	SLOPE	LENGTH	SLOPE	LENGTH	CU. YDS.	
	15 ^②	0.064	8"	6"	21"	3'-1"	4:1	1'-8"	6:1	2'-6"	10:1	5'-10"	0.15	
	18 ^②	0.064	8"	6"	24"	3'-4"	4:1	2'-8"	6:1	4'-0"	10:1	8'-4"	0.16	
	21 ^②	0.064	8"	6"	27"	3'-7"	4:1	3'-8"	6:1	5'-6"	10:1	10'-10"	0.18	
	24 ^②	0.064	8"	6"	30"	3'-10"	4:1	4'-8"	6:1	7'-0"	10:1	13'-4"	0.19	
	30	0.109	12"	9"	36"	5'-0"	4:1	6'-8"	6:1	10'-0"			0.25	
	36	0.109	12"	9"	42"	5'-6"	4:1	8'-8"	6:1	13'-0"			0.27	
	42	0.109	16"	12"	48"	6'-8"	4:1	10'-8"	6:1	16'-0"			0.33	
	48	0.109	16"	12"	54"	7'-2"	4:1	12'-8"	6:1	19'-0"			0.35	

METAL END SECTIONS FOR METAL ARCHED PIPE	EQUV. DIA. (IN.)	SPAN (IN.)	RISE (IN.)	MIN. THICK. IN INCHES	DIMENSIONS				L DIMENSIONS ^①						CONCRETE	METAL ARCHED PIPE
					A	H	W	OVERALL WIDTH	SLOPE	LENGTH	SLOPE	LENGTH	SLOPE	LENGTH	CU. YDS.	
	18 ^②	21	15	.064	8"	6"	27"	3'-7"	4:1	1'-8"	6:1	2'-6"	10:1	5'-10"	0.18	
	21 ^②	24	18	.064	8"	6"	30"	3'-10"	4:1	2'-8"	6:1	4'-0"	10:1	8'-4"	0.19	
	24 ^②	28	20	.064	8"	6"	34"	4'-2"	4:1	3'-4"	6:1	5'-0"	10:1	10'-0"	0.21	
	30	35	24	.079	12"	9"	41"	5'-5"	4:1	4'-8"	6:1	7'-0"			0.27	
	36	42	29	.109	12"	9"	48"	6'-0"	4:1	6'-4"	6:1	9'-6"			0.30	
	42	49	33	.109	16"	12"	55"	7'-3"	4:1	7'-8"	6:1	11'-6"			0.36	
	48	57	38	.109	16"	12"	63"	7'-11"	4:1	9'-4"	6:1	14'-0"			0.39	
	54	64	43	.109	16"	12"	70"	8'-6"	4:1	11'-0"	6:1	16'-6"			0.42	

METAL END SECTIONS FOR CONCRETE ELLIPTICAL PIPE	EQUV. DIA. (IN.)	SPAN (IN.)	RISE (IN.)	MIN. THICK. IN INCHES	DIMENSIONS				L DIMENSIONS				CONCRETE	CONCRETE ELLIPTICAL PIPE
					A	H	W	OVERALL WIDTH	SLOPE	LENGTH	SLOPE	LENGTH	CU. YDS.	
	18	23	14	.064	8"	6"	29"	3'-9"	4:1	1'-4"	6:1	2'-0"	0.19	
	24	30	19	.064	8"	6"	36"	4'-4"	4:1	3'-0"	6:1	4'-6"	0.21	
	30	38	24	.079	12"	9"	44"	5'-8"	4:1	4'-8"	6:1	7'-0"	0.28	
	36	45	29	.109	16"	12"	51"	6'-11"	4:1	6'-4"	6:1	9'-6"	0.34	
	42	53	34	.109	16"	12"	59"	7'-7"	4:1	8'-0"	6:1	12'-0"	0.37	
	48	60	38	.109	16"	12"	66"	8'-2"	4:1	9'-4"	6:1	14'-0"	0.40	
	54	68	43	.109	16"	12"	74"	8'-10"	4:1	11'-0"	6:1	16'-6"	0.44	
	60	76	48	.109	16"	12"	80"	9'-4"	4:1	12'-8"	6:1	19'-0"	0.46	

~ NOTES ~

- ^① DIMENSIONAL TOLERANCE +1" -0"
- ^② FOR METAL END SECTIONS WITH A SLOPE OF 10:1 USE A METAL THICKNESS OF .109" MIN.
- USE WITH CUR. STD. DWGS.
RDB-150 RDB-155

SUBMITTED William S. Leland 12-01-2015
DIVISION DIRECTOR DATE

APPROVED [Signature] 12-01-2015
STATE HIGHWAY ENGINEER DATE

DRAINAGE

REVISION DATE: 12/01/2015
REVISION NUMBER: 0