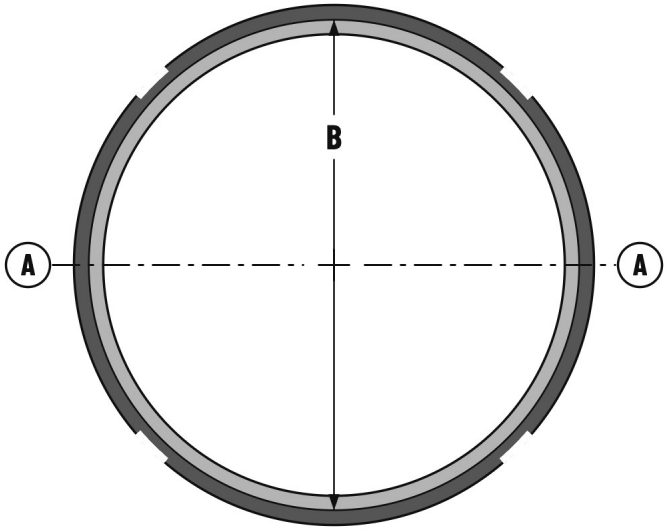
TURNER COMPANY

MANHOLE ADJUSTMENT RING

Composite Riser Ring · Product Cut Sheet

SHEET 1 OF 4
DRAWING



PLAN · N.T.S.

Composite manhole extension ring. Keyway: ¼" indention, 4" wide, equally spaced (4 places).

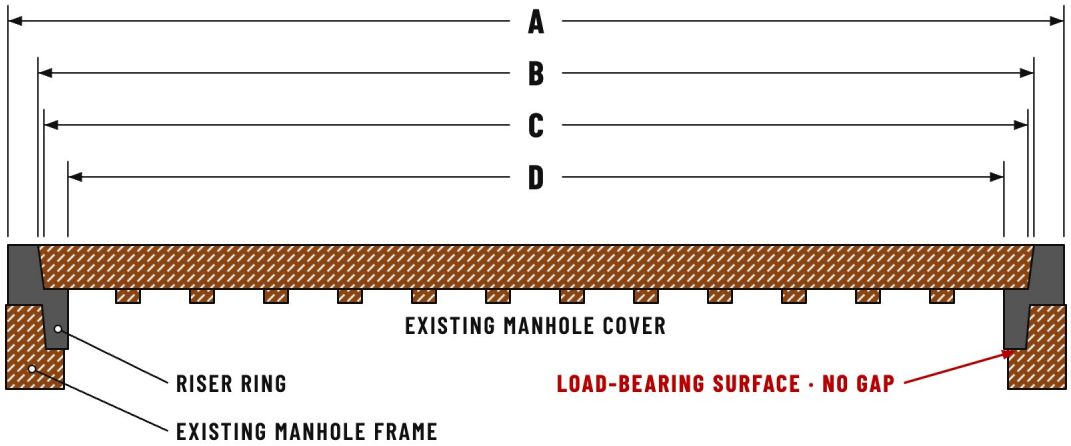
LOAD RATING

AASHTO H-25 / HS-25 — 50,000 lb proof load

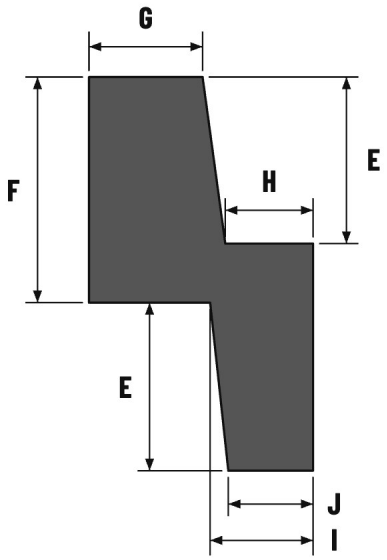
Verified by NC State Constructed Facilities Lab: 50,000 lb proof / 71,263 lb at failure.

SHEET INDEX

1 · Drawing
2 · Schedule & material data
3 · Ordering measurements
4 · Installation



SECTION A–A · THRU ADJUSTMENT RING & EXISTING FRAME · N.T.S.



RING PROFILE · DIMENSION KEY

A	Outside diameter of ring
B	Inside diameter at top of ring
C	Cover seat diameter
D	Clear opening, inside diameter
E	Cover thickness
F	Rise height
G	Top wall width
H	Cover seat width
I	Leg width at top of frame
J	Leg width at bottom

Dimensions A–J for common sizes are scheduled on Sheet 2. Measurements needed when ordering are on Sheet 3.

MANHOLE ADJUSTMENT RING

Composite Riser Ring · Product Cut Sheet

SCHEDULE · COMMON SIZES

	A	B	C	D	E	F*	G	H	I	J
	36	33 ½	33	31	1 ⅜	1	1 ¼	15/16	1 5/16	5/16
	36	33 ½	33	31	1 ⅜	1 ½	1 ¼	15/16	1 5/16	5/16
	34	32	31 ¾	30	1 ⅜	1	1	¾	1	⅝
	34	32	31 ¾	30	1 ⅜	1 ½	1	¾	1	⅝
	34	32	31 ¾	30	1 ⅜	2	1	¾	1	⅝
	31	29	28 ¾	27	1 ⅜	1	⅞	¾	1	⅝
	31	29	28 ¾	27	1 ⅜	1 ½	⅞	¾	1	⅝
	31	29	28 ¾	27	1 ⅜	2	⅞	¾	1	⅝
MAX	**36**	**34**	**33 ½**	**31 ½**	**2**	**3**	**1 ¼**	**1**	**1 5/16**	⅝
MIN	22	20	19 ½	17 ½	⅞	⅝	⅞	¾	⅞	⅝

Sizes are in inches. See Sheet 1 for dimension letters. *F = dimension to be in increments of ⅛".

Note: The table above represents the most commonly available sizes. In addition, rings are available in other circumferences and overlay and cover thicknesses as required. Note the above maximum and minimum dimensions. FJ Turner manufactures 130 different sizes. Consult manufacturer for additional specifications.

GENERAL

1. Dimensions may vary to meet existing field conditions. Any change in dimensions shall be approved by the Director, Materials Bureau.
2. Maximum adjustment height = 6".
3. Fabrication tolerances ± 1/16".

MATERIALS

Ring: composite ring.

TECHNICAL DATA

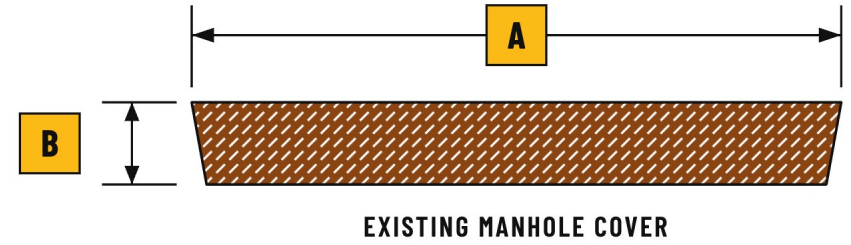
TECHNICAL PROPERTY DATA	RANGE OF VALUES	ASTM METHOD
Fiberglass content, %	13–17	—
Melt flow, g/10 min.	2–4	D1238
Specific gravity	.99–1.02	D792
Tensile strength, psi @ 73°F (23°C)	3,000–4,000	D638
Flexural modulus (tangent), psi	375,000–425,000	D790
Izod impact, ft-lb/in @ 73°F (23°C), notched ½" × ⅛"	1.3–1.7	D256
Gardner impact, in-lb	8–12	D3029
Heat deflection, °F @ 264 psi	250–270	D648
Heat deflection, °F @ 66 psi	270–290	D648
Hardness, Shore "D"	64–68	D2240

MEASUREMENTS NEEDED WHEN ORDERING

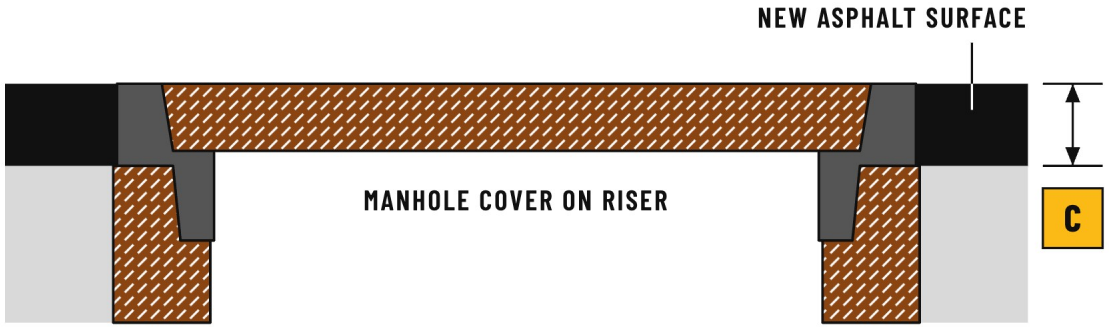
If you have the following measurements handy, please include them with your order or quote request:

- **A** **Lid diameter**
- **B** **Lid thickness (seat depth)**
- **C** **Rise needed (1", 1.5" or 2")**

The riser height equals the thickness of the asphalt overlay after compaction.



EXISTING MANHOLE COVER



Top: existing manhole cover. Bottom: cover reinstalled on the riser ring at the new asphalt surface.

AVAILABLE SIZES

FJ Turner manufactures 130 different sizes.

QUOTES & SIZING

For quote requests and sizing, contact:

James Turner

Phone **919-604-9490**

Email **james@turnermanholerisers.com**

MANHOLE ADJUSTMENT RING

Composite Riser Ring · Product Cut Sheet

INSTALLATION INSTRUCTIONS

1. Remove cover from manhole frame.
2. Clean frame with wire brush or tool to be free of any debris impeding seating of riser ring.
3. Select ring to match overlay of asphalt.
4. Place ring into frame to ensure that both flat surfaces of the ring are supported by the manhole frame.
5. Install ring into frame.
6. Slide cover into extension ring.
7. Ready for resurfacing.

INSTALLATION REQUIREMENT

The riser ring must seat FLUSH on the existing manhole frame. There must be NO GAP between the bottom of the riser and the frame. This contact face is the load-bearing surface — full, continuous contact is required to transfer load into the frame.

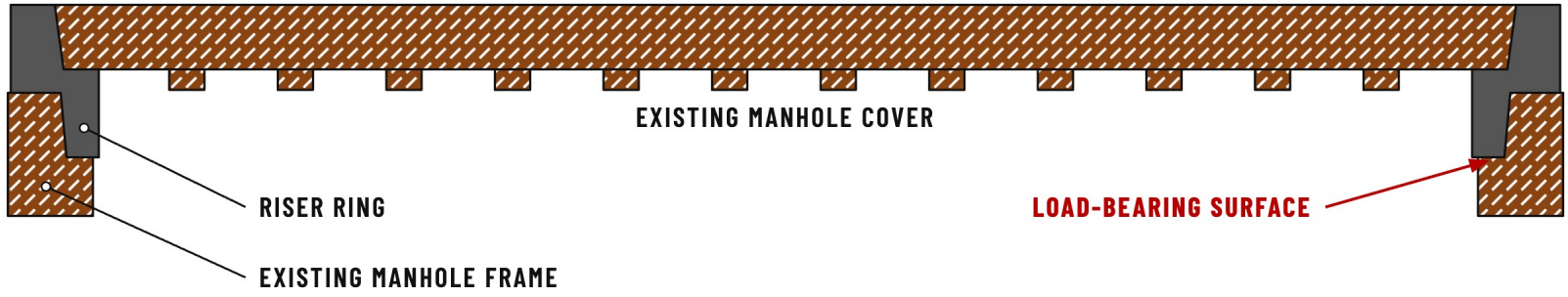
■ **NO GAP ALLOWED AT LOAD-BEARING SURFACE**

LOAD RATING

When the riser is properly seated, load is transferred fully into the manhole frame and the assembly meets and exceeds the 50,000 lb proof-load requirement of AASHTO H-25 / HS-25.

✓ **AASHTO H-25 / HS-25 — 50,000 lb proof load**

Verified by NC State Constructed Facilities Lab: 50,000 lb proof / 71,263 lb at failure.



Cross-section: FJ Turner riser ring seated in existing manhole frame, supporting the cover.