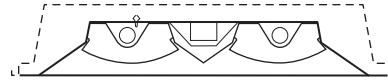
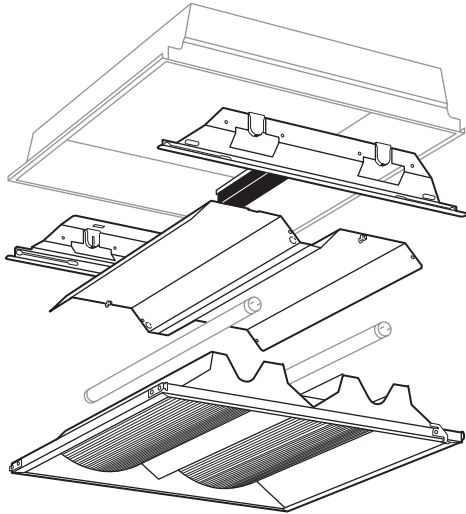


2' x 2' HIGH EFFICIENCY TROFFER RETROFIT KIT

SERIES **HETR**
2' x 2' T8



Housing provided by others.
See back for dimensional requirements.
Lamps not included.

JOB _____

TYPE _____

VOLTAGE _____

SPECIFICATIONS

- HOUSING – Provided by others, must fit within approved minimum dimensions (see back for details).
- REFLECTORS/WIREWAY COVERS – 25-gauge C.R.S.
- SHIELDING – Frosted, ribbed acrylic diffuser.
- DOOR – 22-gauge C.R.S., flat with mitered corners. T-slot steel hinge allows reversible hinging and latching.
- FINISH – Reflectors/Wireway Covers: 92% minimum average reflective white powder coat with multi-stage iron/phosphate prepared metal. Door: Highly-reflective textured matte white powder coat.
- ELECTRICAL – Electronic ballast standard, instant start T8, rated Class P.
- LABELS – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations. UL/CUL classified as luminaire conversion, retrofit kit.
- MOUNTING – Designed to retrofit existing troffers and parabolics in grid ceiling applications.

FEATURES

- Attractive and environmentally sensitive—achieve the fresh appearance of a new architecturally designed fixture while recycling the existing fixture housing.
- Can improve optical efficiency as much as 20% when replacing dated troffers and parabolics, realizing substantial energy savings.
- Allows fixture upgrades without disturbing the ceiling.
- Frosted, ribbed acrylic diffusers combined with highly-reflective matte white paint produce high optical efficiencies while providing visual comfort.
- Designed to fit into most 2' x 2' fixture housings with a minimum fixture depth of 4".
- T-slot steel hinge allows reversible hinging and latching and ensures positive retention when door is opened.
- Cam latches close securely and allow hassle-free maintenance.
- Tool-less access to the electrical from room-side of fixture.
- Quick and easy installation.
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- This fixture is proudly made in the USA.

H.E. Williams, Inc. strongly recommends installing a trial fixture prior to ordering full project quantities.

ORDERING INFORMATION

Submittal

EXAMPLE: SERIES **HETR** - NOM. WIDTH **2** - NOM. LENGTH **2** - TOTAL WATTAGE/LAMPS **17** - SHIELDING **A** - OPTIONS **OPTIONS** - BALLAST **EB2** - VOLTAGE **120**

SERIES	HETR High Efficiency Troffer Retrofit Kit
NOMINAL WIDTH	2 2'
NOMINAL LENGTH	2 2'
TOTAL LAMPS	2

LAMP WATTAGE/TYPE	17 2', 17-watt T8
SHIELDING	A Frosted, ribbed acrylic diffuser
OPTIONS	For emergency ballasts and other options, consult factory.

BALLAST TYPE	EB2 2-lamp electronic ballast
For additional ballast combinations, consult factory.	
VOLTAGE	120 120V
	277 277V
	UNV 120 - 277V
	347 347V



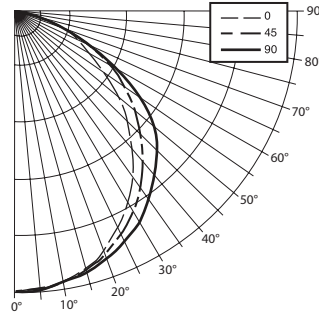
FLUORESCENT LIGHTING

Williams Catalog #HETR-22-217-A-EB2-120
Test Report #14752.0, Dated 06/19/09

Lamp Type: F17T8/835/RS
Lamp Quantity: 2

CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0	45	90	
0	834.	834.	834.	
5	835.	830.	828.	79.2
15	794.	799.	807.	226.5
25	716.	736.	760.	340.9
35	605.	645.	687.	405.7
45	468.	526.	591.	410.4
55	325.	395.	453.	353.0
65	204.	241.	240.	231.8
75	100.	94.	83.	100.9
85	18.	10.	10.	14.2
90	0.	0.	0.	



LUMEN SUMMARY

ZONE	LUMENS	%LAMP	% FIXTURE
0 - 30	647.	23.1	29.9
0 - 40	1052.	37.6	48.7
0 - 60	1816.	64.8	84.0
0 - 90	2162.	77.2	100.0
0 - 180	2162.	77.2	100.0

ZONAL CAVITY COEFFICIENTS

EFFECTIVE FLOOR CAVITY REFL. = .20

WALL RCR	CEILING .80			.70			.50		
	.70	.50	.30	.70	.50	.30	.50	.30	.10
0	.92	.92	.92	.90	.90	.90	.86	.86	.86
1	.85	.82	.79	.83	.80	.78	.77	.75	.73
2	.79	.73	.68	.77	.72	.67	.69	.65	.62
3	.72	.65	.59	.71	.64	.59	.62	.57	.54
4	.67	.58	.52	.65	.57	.51	.55	.50	.46
5	.61	.52	.45	.59	.51	.45	.49	.44	.40
6	.56	.46	.40	.55	.46	.39	.44	.39	.35
7	.52	.42	.35	.50	.41	.35	.40	.34	.30
8	.48	.37	.31	.46	.37	.31	.36	.30	.26
9	.44	.33	.27	.43	.33	.27	.32	.27	.23
10	.41	.30	.24	.40	.30	.24	.29	.24	.20

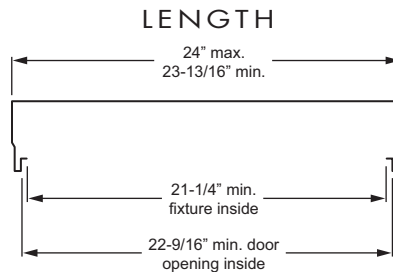
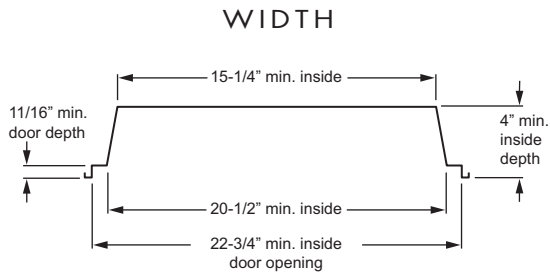
TOTAL LUMINAIRE OPTICAL EFFICIENCY = 77.2%

SPACING CRITERIA: END=1.2 DIAG=1.2 ACROSS=1.3

ADDITIONAL INFORMATION

MINIMUM FIXTURE HOUSING DIMENSIONS

H.E. Williams, Inc. strongly recommends installing a trial fixture prior to ordering full project quantities.



H. E. WILLIAMS, INC.