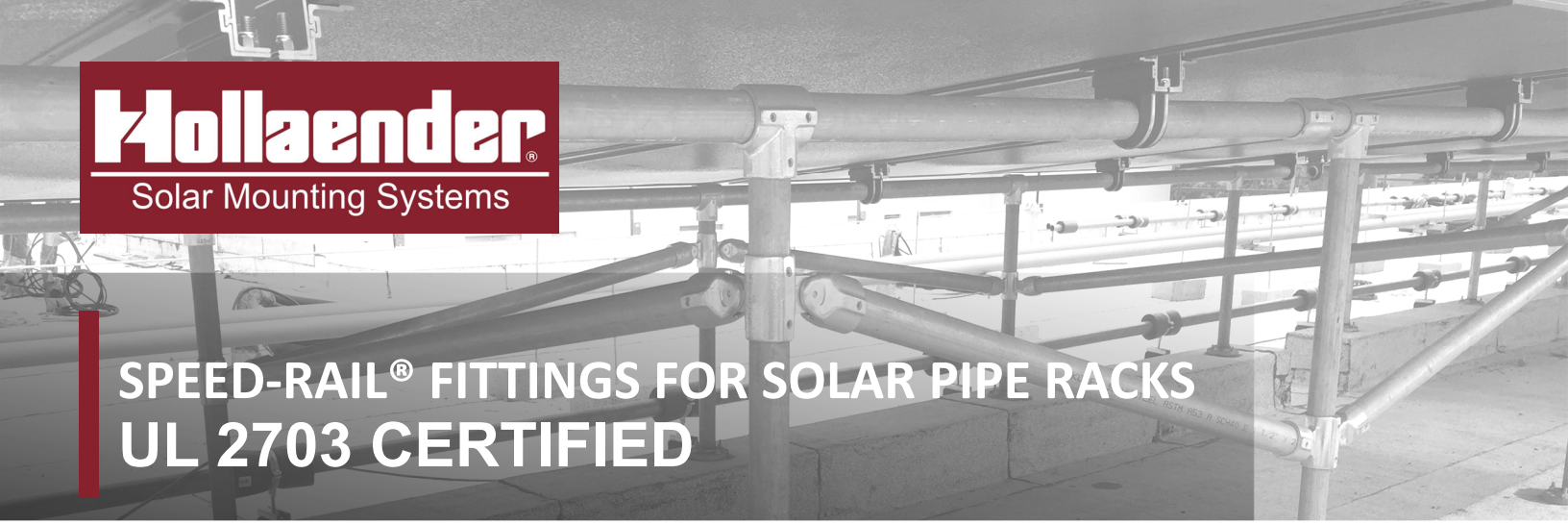


Hollaender®
Solar Mounting Systems

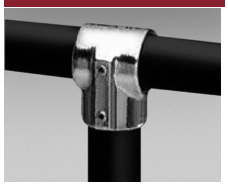
SPEED-RAIL® FITTINGS FOR SOLAR PIPE RACKS
UL 2703 CERTIFIED

TEE FITTINGS

#5

1-1/4", 1-1/2", 2"

#5E



1-1/4", 1-1/2"

#5EX*

1-1/2"

#5EXT*

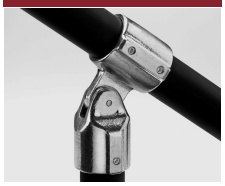
1-1/2"

#5X*

2"

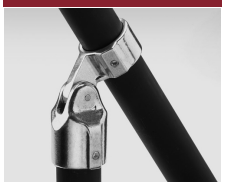
ADJUSTABLE/CROSS BRACING FITTINGS

#17



1-1/4", 1-1/2", 2"

#17E

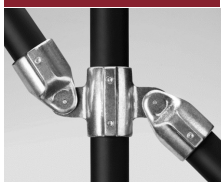


1-1/4", 1-1/2"

#17X*

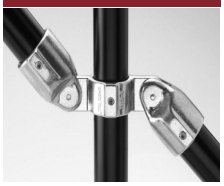
2"

#19



1-1/4",-1/2",2"

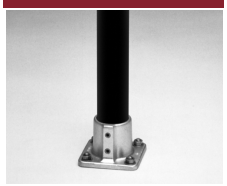
#19E



1-1/2"

MOUNTING FLANGES

#45

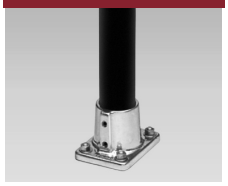


1-1/4", 1-1/2"

#45CE

1-1/4", 1-1/2",2",3",4"

#47

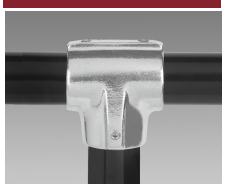


1-1/4",1-1/2",2"

* *Fitting has Extra Set Screw*

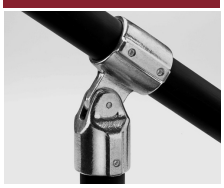
REDUCING FITTINGS

#5



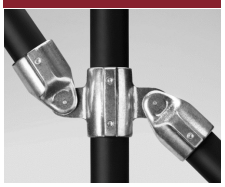
1-1/2"to 2"

#17



2" to 1-1/2"

#19



2" to 1-1/2"

RECOGNIZED COMPONENT

ETL CM LISTED US

Intertek

5006568

Conforms to UL STD 2703

MADE IN THE USA

Photos show a black colored pipe, this is strictly for promotional purposes.

Both in testing and in practice, customers should use A53 Sch. 40 galvanized pipe or 6061-T6 Sch. 40 aluminum pipe.

ALL INSTRUCTIONS OUTLINED IN THIS MANUAL ARE EFFECTIVE JUNE 2022 IN ACCORDANCE WITH INTERTEK

- Speed-Rail® fittings achieve bonding with the pipe when the set screws are adequately tightened, and penetrate the surface of the steel or aluminum pipe.
- Speed-Rail® fittings have been evaluated to UL 2703 grounding and bonding only.
- Speed-Rail® fittings have been evaluated to UL 2703 grounding and bonding for single use only.
- Both in testing and in practice, customers should use A53 Sch. 40 galvanized pipe or 6061-T6 Sch. 40 aluminum pipe.

SET SCREWS SHOULD BE TIGHTENED TO THE TORQUE VALUES LISTED IN THE TABLE BELOW.

Pullout Capacity of Fitting Set Screws When Properly Torqued

Solar Pipe Rack Fittings

Std. IPS Size Steel Pipe, A53 Schedule 40

Pipe must be completely inserted into the barrel of the fitting and secured with recommended torque for proper pullout performance.

Revised 4/4/2024

Fitting Size	Torque Ft. Lbs.^	Resist Pullout No. Set Screws	Set Screw Orientaion	Typical Fitting	Capacity*
4" IPS	20	2	IN LINE	45CE-13	1,600
3" IPS	20	2	IN LINE	45CE-11	1,600
2" IPS	17	1		17-9 Bracing Fitting, 5-9 Tee	1,360
	17	2	IN LINE	47-9, 45CE-9 Base Flanges, 17X-9 Bracing Fitting	1,705
	17	2	AT 90 DEGREES	5X-9 Tee	2,080
1-1/2" IPS	17	1		5E-8 & 5-89 Tees,17-8,17-98,19-98 Bracing Fittings	1,315
	17	2	IN LINE	45-8, 47-8 Base Flanges	1,505
	17	2	AT 90 DEGREES	5EXT-8, 5EX-8 Tee	2,080
1-1/4" IPS	17	1		5E-7 Tee, 17-7 Bracing Fitting	1,265
	17	2	IN LINE	45-7, 47-7 Base Flanges	1,500

All pipe sizes recommended for hurricane prone areas.		
Shear on 303 SS Adj. Pin	Tested	1,960
1/4" Tekscrew inserted through (1) wall of steel pipe	Tested	3,500
3/8" bolt with washer and nut inserted through (2) walls of pipe	Calculated estimate	5,000

*Capacity is based upon a 2:1 factor of safety.

This chart is to be used as a guideline for general design.

- If your system is subject to dramatic loads, we suggest testing parts with specifc pipe used for project.

Significant variations in pipe strength and hardness can have substantial effect on performance.

Rigid Metal Conduit (normally used in the electrical industry) is not to be used with our products.

- the walls of the conduit will cave in under torque and will not produce pullout capacity.
- Set screws should NOT be inserted into threaded portion of the pipe, ONLY into SOLID WALL of pipe.

^ - *Torque values applied to fittings not to exceed 30% of value specified.*

MAINTENANCE

- It is recommended that set screws be checked periodically to ensure that proper torque values are maintained.
- Any components showing signs of damage that compromise safety shall be replaced immediately.

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