

Evaluation Table

PEP ID:	XXXXX
Manufacturer:	Name of Manufacturer
Product Name:	Name of Product

731 Traffic Signals and Light Poles

731 Breakaway Bases

ADOT Stored Specification: 731STRSUP Section 731-2.01(B)(4)

ADOT Drawing: T.S. 5 Series

Responsible Section: Traffic Group

Product Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Definition	731STRSUP 731-2.01(B)(4)	Break-away bases for light poles and flasher poles shall be a frangible pole mounting pedestal (base).		
Fabrication	731STRSUP 731-2.01(B)(4)	Break-Away bases shall be fabricated from 356 T6 aluminum alloys and shall have a stainless steel wheel abraded finish.		
Hardware: General	731STRSUP 731-2.01(B)(4)	The break-away base shall have all the necessary hardware to make a complete and functional unit.		
Hardware: Fabrication	731STRSUP Section 731-2.01(B)(4) ASTM F3125	Bolts, nuts, and washers connecting the pole to the break-away base shall be fabricated from steel conforming to the requirements of ASTM F3125 Grade A325.		
Hardware: Bolts	731STRSUP 731-2.01(B)(4) ASTM F2329	Bolts shall be galvanized in accordance with the requirements of ASTM F2329.		
Hardware: Washers	731STRSUP 731-2.01(B)(4) ASTM B695-85 ASTM F2329	The 2-3/4" x 1/2" thick washers shall be zinc mechanically coated per ASTM B695-85 Class 50 or shall be galvanized per the requirements of ASTM F2329.		
Welding	731STRSUP 731-2.01(B)(4) AWS D1.2	Welding of all components of aluminum break-away bases shall conform to the AWS D1.2 Specifications.		

Product Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Certification	731STRSUP 731-2.01(B)(4)	Break-away bases shall be certified by the manufacturer to meet or exceed the change in momentum requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and to be acceptable for use on Federal Aid projects.		
Certification	731STRSUP 731-2.01(B)(4)	The manufacturer shall certify that the break-away base has been tested and approved by the Federal Highway Administration and that the casting has the same chemistry, mechanical properties, and geometry as the casting used in the tests.		
Hardware: Pole Mounting	T.S. 5.0	Poles shall be mounted on a breakaway base with 4 high-strength bolts (ASTM F3125 Grade A325), utilizing 1 hex nut, 1 flat washer, and 1 – 2 3/4" OD x 1 1/16" ID 1/2" thick steel washer per bolt, all furnished with the breakaway base.		
Base Door: Identification	T.S. 5.0	The base door or cover shall have the base and/or pole manufacturer's name on it.		
Base Door: Secured	T.S. 5.0	The door shall be secured with standard 1/4"-20 stainless steel hex screws or vandal resistant screws. All screws shall be furnished with the base. The door can be hinged, or be a removeable panel.		
Labeling: Caution and Use	T.S. 5-0	The caution and use instructions label shall be secured inside the base on the wall opposite of the access door plate or on the cover itself.		
Standard Conformance	T.S. 5-0	The base, as supplied and installed, shall conform to all applicable AASHTO, NCHRP, and FHWA requirements for frangibility bases for roadway light poles.		

Product Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Type 2 Cast Aluminum*	T.S. 5-1	Type 2 cast aluminum breakaway bases shall conform to requirements detailed in Standard Drawing T.S. 5-1.		
Type 3 Cast Aluminum*	T.S. 5-2	Type 3 cast aluminum breakaway bases shall conform to requirements detailed in Standard Drawing T.S. 5-2.		

*Specify Base Type in APL Notes if not specified in product name:
Type 2: 10"-12" diameter bolt circle / Type 3: 13"-15.12" diameter bolt circle
Check Type 2 and Type 3 product dimensions vs. drawing dimensions