



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Georgia Division**

December 10, 2014

61 Forsyth Street S.W.  
Suite 17T100  
Atlanta, Georgia 30303  
Phone 404-562-3630  
Fax 404-562-3703  
Georgia.fhwa@fhwa.dot.gov

In Reply Refer To:  
HPE-GA

Keith Golden, P.E. Commissioner  
Georgia Department of Transportation  
One Georgia Center  
600 West Peachtree Street, NW  
Atlanta, GA 30308

Dear Commissioner Golden:

We have reviewed the request to use proprietary items on the Transportation Enhancement (TE) Project, PI# 0009010, located in the City of Acworth, Cobb County.

Insufficient information was provided to determine that a proprietary item is needed for decorative stamped asphalt for crosswalks. Typically these items can be provided by multiple manufacturers in an array of colors, shapes, and sizes that would appear to be able to meet the aesthetic unity desired in this project. Please correct the information and resubmit your request.

FHWA finds that it is in the public interest to use the following items for the purposes of aesthetic and logistic synchronization:

Benches:

- Manufacturer: Victor Stanley
- Model: C-10, Classic Series, 6' bench
- Color: Black with gray plastic slats

Trash Receptacle:

- Manufacturer: Victor Stanley
- Model: PSO\*32, Protone Series, 36 gallon with Standard PST-32 tapered formed lid
- Color: Black

Pedestrian Luminaires and Light Poles:

- Luminaire: GE Torch II Luminaire
- Manufacturer: GE Lighting Solutions
- Model: T2HF-10-S-1-H-2-2G-G-A-Black-(luminaire with glass globe)
- Color: Black

This public interest finding is only applicable for the benches, trash receptacles, and pedestrian luminaries and light poles listed above. Furthermore, this public interest finding is only applicable for use on PI# 0009010, in Cobb County. The City of Acworth is responsible for ensuring that these items comply with the Buy America Act.

If you have any questions, please contact Julio A. Nuñez at (404) 562-3638.

Sincerely,



 Rodney N. Barry, P.E.  
Division Administrator

Cc: Brent Story, State Design Policy Engineer

Keith Golden, P.E., Commissioner



GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW  
Atlanta, Georgia 30308  
Telephone: (404) 631-1000

December 2, 2014

Mr. Rodney Barry – Division Administration  
Federal Highway Administration  
61 Forsyth Street, Suite 17T100  
Atlanta, GA 30277  
**Attention: Melinda Roberson**

Subject: Proprietary Items Usage  
PI # 0009010  
CS 282 (formerly CR 4520)/North Main Street from Wood Street to Enclave Drive, Acworth  
City of Acworth, Cobb County

Mr. Barry:

Please review the attached request from the City of Acworth for the use of proprietary pedestrian lighting items, benches, a trash receptacle, and decorative stamped asphalt for crosswalks along the CS 282 (formerly CR 4520)/North Main Street/Old US 41 Transportation Enhancement Project, P.I. Number 0009010. Please note that North Main Street/Old US 41 within the city limits of Acworth has recently changed from CR 4520 to CS 282.

The City of Acworth has previously installed identical items in the project vicinity and intends to continue to utilize the requested products in future streetscape projects. In order to ensure aesthetic continuity within its downtown area, the City of Acworth respectfully requests approval to utilize the requested items.

The Department considers the use of the proposed proprietary items to be in compliance with 23 CFR 635.411 for aesthetic synchronization.

Should you have any questions or concerns, please contact Dave Peters at 404-631-1738 or Jeanne Kerney at 404-631-1982.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brent Story".

for: Brent Story, P.E.  
State Design Policy Engineer

BAS:drp

Tommy Allegood, Mayor

Board of Aldermen:

Tim Houston  
Albert L. Price  
Gene Pugliese  
Tim Richardson  
Brett North



Brian M. Bulthuis, City Manager  
Douglas R. Haynie, City Attorney  
Regina R. Russell, City Clerk

4415 Senator Russell Avenue  
Acworth, Georgia 30101  
(770) 974-3112  
Fax (770) 917-0590  
www.acworth.org

November 20, 2014

Ms. Jeanne Kerney  
TE Project Manager  
Moreland Altobelli Associates, Inc.  
2211 Beaver Run Road, Suite 190  
Norcross, GA 30071

RE: Use of Proprietary Items for  
CR 4520/North Main St. from Wood Street to Enclave Drive, Cobb County  
GDOT PI: 0009010, CSTE-0009-00(010)

Dear Ms. Kerney,

As per Federal Highway Administration regulation in 23 CFR 635.411(a) 2, proprietary materials, specifications, and processes can be used if their use is essential for synchronization with existing highway facilities. For the City of Acworth's Transportation Enhancement Project, PI# 0009010, CSTE-0009-00(010) the following proprietary items are proposed for use:

**Benches:**

Manufacturer: Victor Stanley  
Model: C-10, Classic Series, 6' bench  
Color: Black with gray plastic slats  
Quantity in Project: 2  
Total Estimated Cost for Benches: \$4,000.00

**Trash Receptacle:**

Manufacturer: Victor Stanley  
Model: PSO-32, Protone Series, 36 gallon with Standard PST-32 tapered formed lid  
Color: Black  
Quantity: 1  
Total Estimated Cost for Trash Receptacle: \$1,500.00

**Decorative stamped asphalt for crosswalks:**

Manufacturer: Quest Construction Products  
Quantity: 1,910 square feet  
Total Estimated Cost for StreetBond: \$13,370.00

Product: StreetBond 150 Coated Asphalt  
Pattern: Diagonal Herringbone (stamped)  
Color: Brick

**Pedestrian Luminaires and Light Poles:**

*LUMINAIRE:* GE Torch II Luminaire  
Manufacturer: GE Lighting Solutions  
Model Number:  
- T2HF-10-S-1-H-2-2G-G-A-BLCK-  
(luminaire with glass globe)  
Accessories: Fleur-de-Lis finial top; PE receptacle  
Color: Black  
Quantity: 23  
*Breakaway Support System for Light Pole:* Pole-Safe  
Manufacturer: Transpo Industries, Inc.  
Model Number: 4062  
Quantity: 23  
Total Estimated Cost for Luminaires and Posts: \$58,000.00

*LIGHT POLE:* Amerlux Tapered Fluted Shaft  
Manufacturer: Amerlux  
Model: D90-C12/GFCI-RM-TOP/BLK  
Specs: 12' shaft height, 5 ½" – 3 ½" tapered,  
fluted shaft, Tenon top, 13" diam. Base,  
GFCI receptacle, weather proof cover  
Color: Smooth Satin Black  
Quantity: 23

The total estimated costs for materials listed above are based on recent construction bids on similar projects. These costs include materials, labor, tax, and freight.

The estimated total construction cost for the project is \$450,000.00. The cost of \$76,870.00 for proprietary items represents 17% of the estimated construction costs.

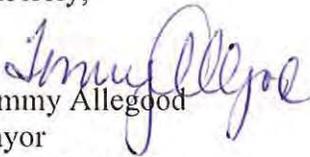
The specific products designated by the City of Acworth are the ones that are being used in the construction drawings. These products have been installed in previous projects (benches & trash receptacles were from GDOT PI #0006262, CSSTP-0006-00(262); City Stamped Asphalt for Crosswalks by Quest Construction Products was from a Dallas Street SPLOST funded project; luminaires & light poles were from Winn Street resurfacing project – SPLOST Funded) in the City of Acworth. These products will also be used in all future streetscape enhancement projects in the City of Acworth.

On the construction plans, we have exhibited the product information and contact information for each product's manufacturer. We also attached photographs of existing areas with the products in use.

I, Tommy Allegood, Mayor of the City of Acworth do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), that these proprietary items are essential for synchronization with existing highway facilities. The use of these products is essential for aesthetic synchronization to match the visual appearance of existing facilities previously installed in the City of Acworth.

The City of Acworth respectfully requests that the use of these proprietary products be approved.

Sincerely,

  
Tommy Allegood  
Mayor  
City of Acworth

**Enclosures:**

- A. Photos of existing items
- B. Manufacturer details for each proprietary item.

**Photos of Existing Items Located Within the City of Acworth, GA**



**Typical Victor Stanley City Bench – GDOT PI#0006262, CSSTP-0006-00(262)**



**Typical Victor Stanley City Trash Receptacle - GDOT PI#0006262, CSSTP-0006-00(262)**

**Photos of Existing Items Located Within the City of Acworth, GA**

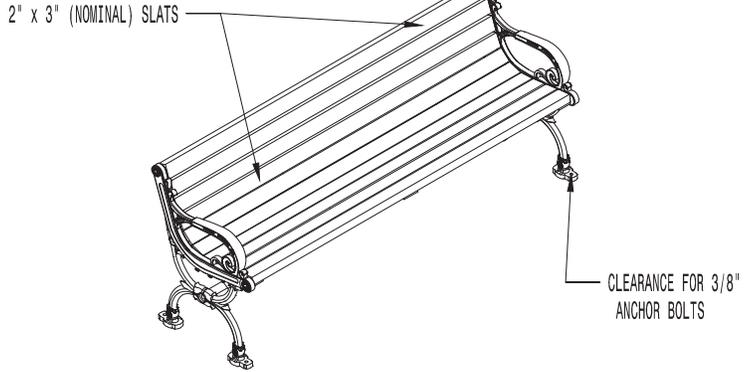
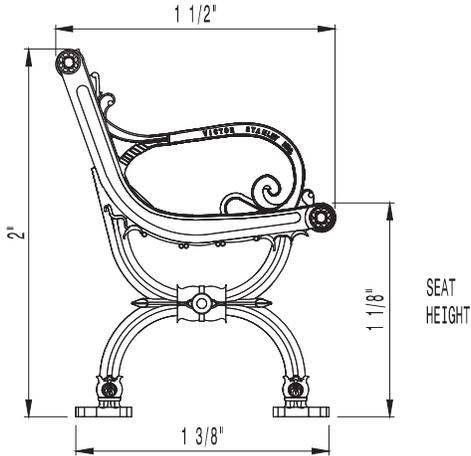


**Typical City Stamped Asphalt for Crosswalks by StreetPrint – Dallas Street SPLOST Project**

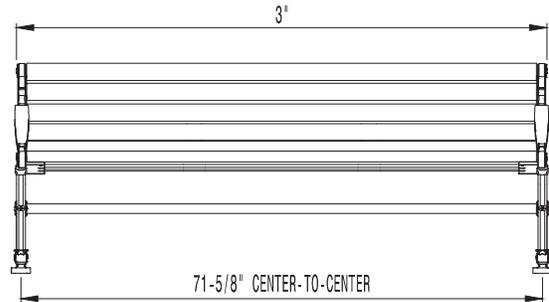
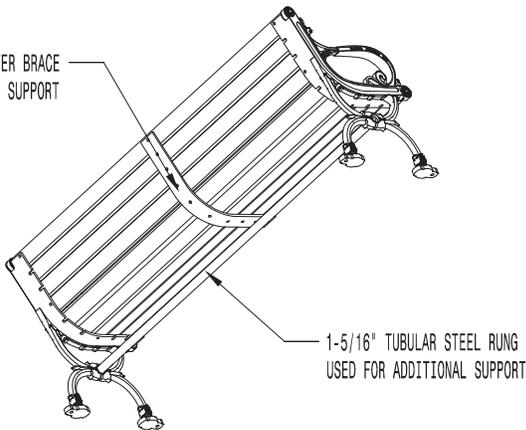


**Typical Pedestrian Luminaires and Light Pole – Winn Street resurfacing project SPLOST  
Funded**

\* ALL DIMENSIONS ARE IN INCHES \*



3/8" x 3" CENTER BRACE  
 FOR ADDITIONAL SUPPORT



CENTER-TO-CENTER DISTANCES ARE APPROXIMATE  
 (VARIATIONS IN CASTINGS ARISE FROM DIFFERENT RATES OF COOLING)

AVAILABLE OPTIONS:

POWDER COATING

10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,  
 CUSTOM COLORS (INCLUDING THE RAL RANGE)

black

SLAT TYPES

WOODS: PHILIPPINE MAHOGANY AND IPE

2nd SITE SYSTEMS® REINFORCED RECYCLED PLASTIC SLATS

COLORS: GRAY, MAPLE, CHERRY, AND WALNUT  
 (NOT AVAILABLE IN 8-FOOT LENGTHS)

INTERMEDIATE & CENTER ARMRESTS

4', 6', & 8' AVAILABLE WITH OPTIONAL ARMRESTS

(none)

LENGTHS

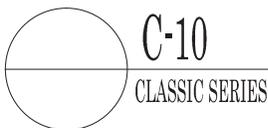
STANDARD 4'

STANDARD 6' LENGTH SHOWN

STANDARD 8'

NOTES:

1. DUCTILE IRON CASTINGS COME WITH A TEN YEAR WARRANTY AGAINST BREAKAGE.
2. DRAWING NOT TO SCALE. DO NOT SCALE DRAWINGS.
3. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
4. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
5. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
6. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
7. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
8. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.

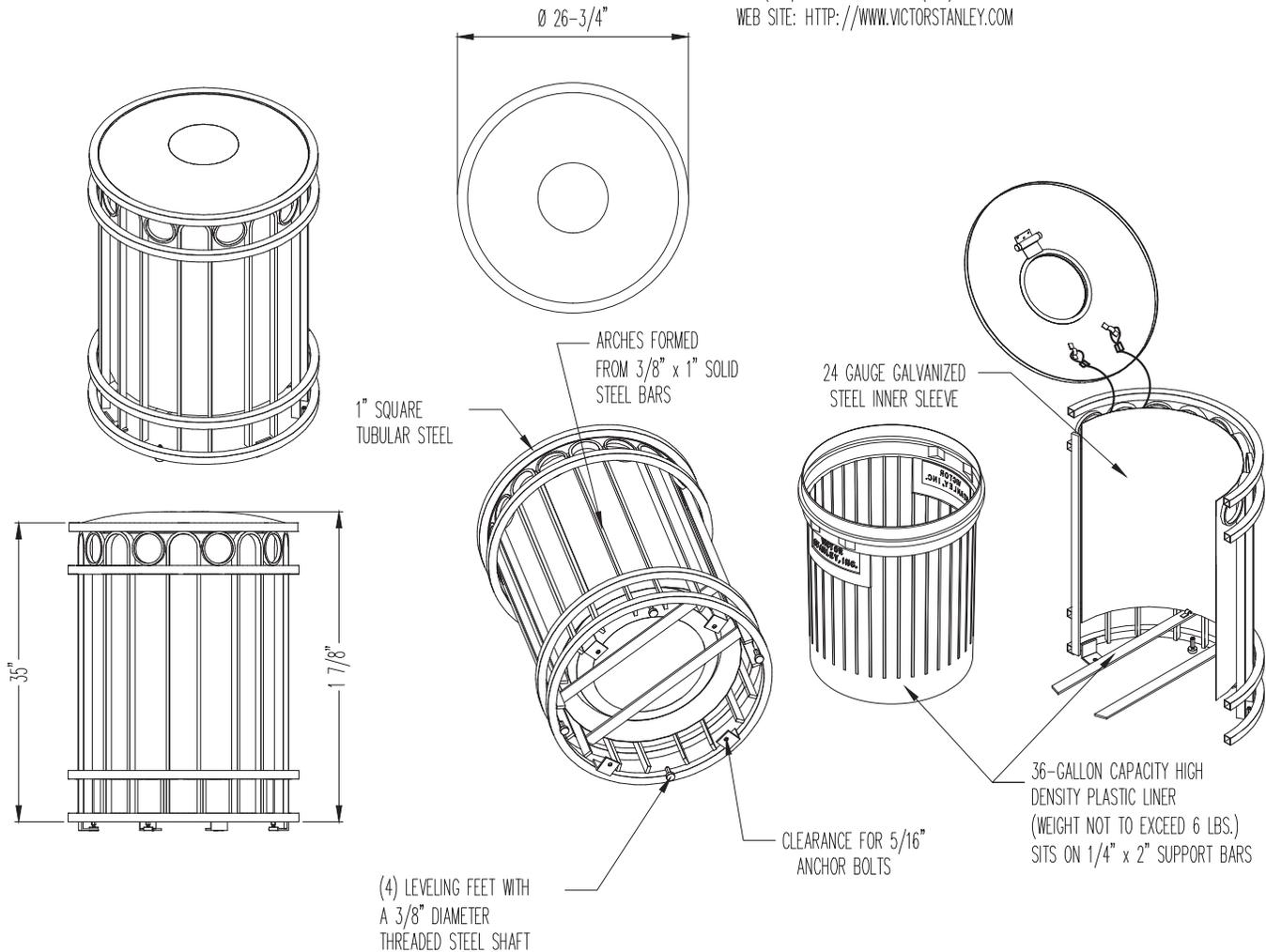


BENCH WITH DUCTILE IRON END FRAMES  
 SHOWN: STANDARD 6-FOOT LENGTH



**VICTOR STANLEY, INC.**  
 -Manufacturers of Quality Site Furnishings since 1962-

P.O. DRAWER 330 - DUNKIRK, MD 207  
 TOLL FREE: (800) 368-2573 (USA &  
 TEL (301) 855-8300 - FAX (410) 257-7579  
 WEB SITE: HTTP://WWW.VICTORSTANLEY.COM



#### AVAILABLE OPTIONS:

##### POWDER COATING

10 STANDARD COLORS, CUSTOM COLORS (INCLUDING THE RAL RANGE)  
 AVAILABLE WITH 2-COLOR CONFIGURATION (THE INNER SLEEVE  
 MAY BE A DIFFERENT COLOR THAN THE RECEPTACLE).

**black**

##### CUSTOM PLAQUES & DECALS

AVAILABLE WITH STEEL PLAQUES IN VARIOUS SIZES AND PRESSURE  
 SENSITIVE VINYL OUTDOOR DECALS.

#### NOTES:

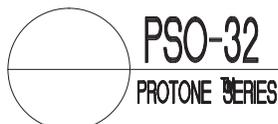
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD FILM COATING. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. VICTOR STANLEY, INC., PLASTIC INNER LINERS ARE MOLDED ON TOOLING DESIGNED FOR AND OWNED BY VICTOR STANLEY, INC. THEY OFFER MAXIMUM CAPACITY AND STRENGTH WITH LIGHTWEIGHT CONSTRUCTION USING CRITICAL MOLDED RIBS, INTEGRAL HANDHOLDS, AND HIGH-STRENGTH MATERIALS. THIS MINIMIZES HANDLING DIFFICULTY AND FACILITATES EASY EMPTYING AND STORAGE WHILE AFFORDING LONG SERVICE LIFE.
5. ANCHOR BOLT NOT PROVIDED BY VICTOR STANLEY, INC.
6. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
7. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
8. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.

#### LIDS

**STANDARD PST-32 TAPERED FORMED LID.** AVAILABLE WITH OPTIONAL  
 PST-2 FORMED DOME, PST-2 FORMED DOME WITH STAINLESS STEEL ASHTRAY,  
 AND DSP-32 FORMED DOME WITH SELF-CLOSING DOOR (AS SHOWN).

#### SECURITY

LID IS SECURED WITH VINYL COATED GALVANIZED STEEL AIRCRAFT CABLE.  
 CABLE IS LOOPED AROUND ATTACHMENT BRACKETS AND  
 CRIMPED IN PLACE.



**PSO-32**  
**PROTRONIC SERIES**

36-GALLON LITTER RECEPTACLE  
 SHOWN: OPTIONAL DSP-32 FORMED DOME LID WITH SELF-CLOSING DOOR



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

### PART 1 – GENERAL

#### 1.1 DESCRIPTION

- A. **StreetBond** Advanced Coatings for Asphalt are specifically formulated for application to asphalt pavement and have been confirmed by a certified testing facility to possess a balance of performance properties for a durable and color-fast finish.
- B. A variety of **StreetBond** coating colors are available. Please refer to [www.quest-cp.com](http://www.quest-cp.com) to view these. Custom colors are available upon request.
- C. In addition to being used on flat asphalt surfaces, **StreetBond** coatings have been formulated to work in conjunction with the StreetPrint® asphalt imprinting process to create the appearance of unit paving materials. For more information about the StreetPrint® process visit [www.streetprint.com](http://www.streetprint.com).
- D. **StreetBond** coatings are suitable for a wide variety of pavement applications. Cycle lanes, sidewalks, parking lots, walkways, cross-walks, medians, plazas, dedicated bus lanes, entranceways, and residential driveways are some examples of successful applications of **StreetBond** coatings both with and without the StreetPrint® process.
- E. Certain colors of the **StreetBond** coatings have been independently verified to have an SRI greater than 29 and therefore can help projects qualify for points in the LEED program under Heat Island Effect: Non-Roof. Please refer to [www.quest-cp.com](http://www.quest-cp.com) for further information.
- F. Qualifications. Only **Accredited StreetBond Applicators** may bid for and perform the imprinted portion of this work. Please refer to **Section 1.3 DEFINITIONS**.
- G. **StreetBond** products are manufactured in **ISO9001 / ISO14001** facilities to ensure quality products produced in legally-responsible and environmentally-conscious manner
- H. **StreetBond** coatings are only available from Quest Construction Products.
- I. **StreetPrint®** is a registered Trademark of Ennis Flint.

#### 1.2 REFERENCES

- A. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.
- B. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.
- C. ASTM D-2697 Standard Test Method for Volume of Nonvolatile Matter in Clear or Pigmented Coatings.
- D. ASTM D522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.
- E. ASTM D1653 Standard test method for water vapor transmission through organic film coatings.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

- F. ASTM G-154 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.
- G. ASTM D 2369 Weight Solids Standard test method for Volatile Content of Coatings.
- H. ASTM D 1475 Standard Test method for Density of Paint, Varnish, Lacquer, Other related products.
- I. ASTM D-2240 (2000) Standard Test Method for Rubber property – Durometer hardness.
- J. ASTM D-5895 Standard Test Method of drying or curing during film formation of organic coatings using mechanical recorders.
- K. ASTM D-570 Standard Test Method for water absorption of plastics.

### 1.3 DEFINITIONS

- A. **“Accredited StreetBond Applicator”** has valid Certification for both Textured (stamped) and Non-Textured (flatwork) as offered by Quest Construction Products and are reviewed on an annual basis. All **Accredited StreetBond Applicators** have been qualified by Quest Construction Products to perform the Work and offer a product Warranty.
- B. **“Approved Applicator”** has valid Certification for non-textured (flatwork) application **ONLY** as offered by Quest Construction Products and are reviewed on an annual basis. Product Warranties may be available to **Approved Applicators** but require approval and supervision by a Quest Construction Products Technical Sales Representative.
- C. **“Applicator”** means the installer of the **StreetBond** coatings.
- D. **“Owner”** means the Owner and refers to the representative person who has decision making authority for the Work.
- E. **“TSR”** is a Quest Technical Sales Representative who manages the StreetBond product in a given territory.
- F. **“Stamped asphalt pavement”** is asphalt pavement that has been subjected to imprinting or texturing in a specific pattern.
- G. **“Non-Stamped asphalt pavement”** is asphalt pavement that is unstamped and is sometimes referred to as “flatwork”.
- H. **The “Work”** is the asphalt pavement texturing work contemplated in this bid submission and specification.
- I. **“Scuffing”** is a “tear” of the asphalt pavement caused by an external force – for example turning the steering wheel of a stationary vehicle. Scuffing is generally the result of poorly designed or improperly installed asphalt and would most-commonly be seen on weaker residential asphalt.
- J. **“Layer”** is a signal thin pass of coating, applied with a texture spray gun, which is allowed to dry before the next layer is applied.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

K. “**Warranty**” is a guarantee to the property owner that StreetBond150, when properly applied will not peel, delaminate or show abnormal wear over specific period of time depending on the traffic volumes and number of layers applied. Please contact your local TSR for more details.

### 1.4 SUBMITTALS

A copy of the Accreditation Certificate, available from the **Applicator**, is required with submittal. Independent test results available upon request.

## PART 2 – PRODUCTS

### 2.1 MATERIALS – STREETBOND COATINGS

**StreetBond** coatings have been scientifically formulated to provide the optimal balance of performance properties for a durable, long-lasting color and textured finish to asphalt pavement surfaces. Some of these key properties include wear and crack resistance, color retention, adhesion, minimal water absorption and increased friction properties. **StreetBond** coatings are environmentally safe and meet EPA requirements for Volatile Organic Compounds (VOC).

- A. **StreetBond150** is a premium epoxy-modified acrylic, waterborne coating specifically designed for application on asphalt pavements. It has a balance of properties to ensure good adhesion and movement on flexible pavement, while providing good durability. **StreetBond150** is durable in both dry and wet environments
- B. **StreetBond CemBase** is a high-performance cementitious, epoxy-modified, acrylic-based, waterborne surfacing product designed for application only on textured asphalt pavements as a fortifying base coat. At least one layer of **StreetBond150** must be applied over top of **StreetBond CemBase**. **StreetBond CemBase** should NOT be used on non-textured asphalt pavement.
- C. **StreetBond Colorant** is a highly-concentrated, high quality, UV stable pigment blend designed to add color to **StreetBond150** coatings. One unit of Colorant shall be used with one pail of **StreetBond** coating material.

#### 2.1.1 Properties of StreetBond coatings

The following tables outline the test results for physical and performance properties of the **StreetBond** coatings as determined by an independent testing laboratory.

**TABLE 1: Typical Physical Properties of StreetBond Coatings.**

Characteristic	Test Specification	SB150
Solids by Volume	ASTM D-2697	58.187%
Solids by Weight	ASTM D-2369	74.919%
Density	ASTM D-1475	13.27 lbs/gal (1.58 kg/l)



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

**TABLE 2: Typical Performance Properties of StreetBond Coatings**

Characteristic	Test Specification	SB150
Dry time (To re-coat)	ASTM D-5895 23°C; 37% RH	35 min
Taber Wear Abrasion Dry H-10 wheel	ASTM D-4060 1 day cure	0.760g/1000 cycles
Taber Wear Abrasion Wet H-10 wheel	ASTM D-4060 7 days cure	1.670g/1000 cycles
QUV Accelerate Weathering Environment	ASTM G-151 ΔE 1,500hrs.	0.53 (Brick Colorant)
Hydrophobicity Water Absorption	ASTM D-570	11.945%
Shore hardness	ASTM D-2240	38.3
Mandrel Bend	ASTM D522-93A	1/4" @ 21° C
Permeance	ASTM D-1653	3.45g/m <sup>2</sup> / 24hr/mmHg (52 mils)
VOC	per MSDS	19.14%
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction	ASTM E-303 British Pendulum Tester	Wet=77.3 Dry=81.3

Certificates of Analysis are available upon request for each of these properties.

### 2.2 EQUIPMENT FOR STREETBOND APPLICATION

The equipment described has been designed specifically for optimal application of StreetBond coatings. Other equipment may or may not be suitable and could compromise the performance of the StreetBond coatings and/or reduce crew productivity.

- A. The SB Flex Sprayer** is a proprietary coating sprayer supplied by Intech Equipment and is capable of applying the **StreetBond** coatings to the asphalt pavement surface in a thin, controlled film which will optimize the drying and curing time of the coating. A **Graco RTX** and **RapidSprayerII** sprayer may also be used.
- B. The StreetBond Coatings Mixer** is a motorized mixing device designed to ensure efficient and thorough blending of the **StreetBond** components.
- C. Backpack or Hand-Held sprayer** to apply the diluted **StreetBond Adhesion Promoter Concentrate**.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

- D. The **RapidFinisher II** is an electric powered broom produced by Integrated Paving Concepts Inc. that can be used in the application of **StreetBond** coatings to improve productivity. It is especially useful on larger projects.

### PART 3 - EXECUTION

#### 3.1 GENERAL

**StreetBond coating** shall be supplied and applied on non-textured asphalt surface by an **Accredited StreetBond Applicator** in accordance with the plans and specifications or as directed by the Owner. Do not begin installation without confirmation of an Accreditation Certificate. Specifications for the execution of the **StreetPrint®** system can be found at [www.quest-cp.com](http://www.quest-cp.com).

#### 3.2 PRE-CONDITIONS

The condition of the asphalt substrate will impact the performance of the **StreetBond** coatings. A highly stable asphalt pavement free of defects is recommended.

##### 3.2.1 Pre-requisites for new asphalt pavement

A durable and stable asphalt pavement mix design installed according to best practices over a properly prepared and stable substrate is a pre-requisite for all long-lasting asphalt pavement surfaces. The application of **StreetBond** does not change this requirement.

**For information regarding the asphalt pavement mix design where the StreetPrint® process will be used see [www.streetprint.com](http://www.streetprint.com).**

##### 3.2.3 Pavement Marking Removal: recommended guidelines

Pavement markings may be removed by sandblasting, water-blasting, grinding, or other approved mechanical methods. The removal methods should, to the fullest extent possible, cause no significant damage to the pavement surface.

The Owner shall determine if the removal of the markings is satisfactory for the application of **StreetBond** coatings. Work shall not proceed until this approval is granted.

##### 3.2.4 Surface Preparation

The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

### 3.3 APPLICATION OF STREETBOND COATINGS

#### 3.3.1 Coating Application Guidelines

- A. The **Applicator** shall use the **SB Flex Spray System** or suitable texture coatings sprayers to apply the **StreetBond** coatings.
- B. The asphalt pavement surface shall be completely dry and thoroughly cleaned prior to application of the coatings.
- C. The coating application shall proceed as soon as practical upon completion of the imprinting of the asphalt pavement where applicable.
- D. For polished asphalt, **StreetBond Adhesion Promoter** should be applied directly to the asphalt and allowed to dry completely prior to the first layers of coating.
- E. The first layer of coating shall be spray applied then broomed to work the coating material into the pavement surface. Subsequent applications shall be sprayed then broomed or rolled. Each application of coating material shall be allowed to dry to the touch before applying the next layer.
- F. The **Applicator** shall apply the **StreetBond** coatings only when the air temperature is 50°F / (10°C) and rising and will not drop below 50°F / (10°C) within 24 hours. No precipitation should be expected within 24 hours.

### 3.4 COATING COVERAGE & THICKNESS

#### 3.4.1 Typical Coverage Rates and Material Thickness

Coating coverage and thickness is as outlined in **TABLE 4** below. Actual coverage may be affected by the texture of the asphalt pavement substrate and the imprint pattern selected. There will be less coverage with the first layer and higher coverage with subsequent layers.

**TABLE 4: COATING COVERAGE AND THICKNESS**

# OF LAYERS	COVERAGE (approx.)		THICKNESS (approx.)			
	NON-TEXTURED		WET		DRY	
	sqft/unit*	sqm/unit*	mm	mil	mm	mil
3	200	18.6	0.84	33	0.48	19
4	150	13.9	1.12	44	0.66	26
5	120	11.2	1.40	55	0.81	32
6	100	9.3	1.68	66	0.97	38

\*1 unit is a nominal 5 gallon pail comprising Part A, Part B and Colorant (approximately 4.12 gallons). 1 unit when sprayed as a single layer covers approximately 600sqft (55.7 sqm), with an approximate thickness of 6.3mil (0.16mm) dry.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

### 3.4.2 SELECTIVE USE OF CEMBASE FOR SCUFFING CONCERNS

**StreetBond CemBase** is a high-performance cementitious, epoxy-modified acrylic based, waterborne surfacing product designed for application on stamped (textured) asphalt pavements only. **CemBase** fortifies asphalt pavement to help resist scuffing on weaker stamped asphalt. As shown in **TABLE 5**, **CemBase** is applied in two initial layers to create a base coat for **StreetBond150 to be applied on top**. **CemBase** can be substituted for the first two layers of any stamped application as prescribed in **TABLE 6** below. **CemBase** must always be covered with at least one layer of **StreetBond150**. The use of **CemBase** is at the applicator's discretion based on the condition of the asphalt.

**TABLE 5: CEMBASE COATING COVERAGE AND THICKNESS**

# OF INITIAL LAYERS	COVERAGE (approx.)		THICKNESS (approx.)			
	NON-TEXTURED		WET		DRY	
	sqft/unit*	sqm/unit*	mm	mil	mm	mil
<b>2</b>	<b>300</b>	<b>18.6</b>	<b>0.56</b>	<b>22</b>	<b>0.32</b>	<b>13</b>

\*1 unit is a completely mixed unit of StreetBond CemBase with the necessary amount of water for the climate conditions (average mixed volume for 1 unit is 4 gallons). 1 unit when sprayed as a single layer covers approximately 600sqft (55.7 sqm), with an approximate thickness of 6.3mil (0.16mm) dry.



## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

### 3.5 Recommended Coating Coverage Rates

Please check with Quest Construction Products in advance to confirm the recommended application for the climate conditions at the project location.

**TABLE 6: Recommended Coating Coverage Rates**

Application	Hot Dry Climate	Temperate/Winter Climate
<b>Pedestrian only</b>	3 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 200 ft <sup>2</sup> (18.6m <sup>2</sup> ) per 5 gallon (20 Litre) unit	3 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 200 ft <sup>2</sup> (18.6m <sup>2</sup> ) per 5 gallon (20 Litre) unit
<b>Residential driveway</b>	3 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 200 ft <sup>2</sup> (18.6m <sup>2</sup> ) per 5 gallon (20 Litre) unit	3 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 200 ft <sup>2</sup> (18.6m <sup>2</sup> ) per 5 gallon (20 Litre) unit
<b>Vehicular traffic</b>		
<b>Up to 500 cars per day per lane</b>	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit
<b>500 to 1000 cars per day per lane</b>	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit, plus one additional layer in the wheel paths
<b>1000 to 2000 cars per day per lane</b>	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit, plus one additional layer in the wheel paths	4 layers at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit, plus two additional layers in the wheel paths
<b>2000 to 3000 cars per day per lane</b>	4 passes at 600 ft <sup>2</sup> (56m <sup>2</sup> ) per 5 gallon (20 Litre) unit for a net coverage of 150 ft <sup>2</sup> (13.9m <sup>2</sup> ) per 5 gallon (20 Litre) unit, plus two additional layers in the wheel paths	<b>No warranty is provided for traffic levels above 2000 cars per day per lane</b>
	<b>No warranty is provided for traffic levels above 3000 cars per day per lane</b>	

- 1. Additional layers** of **StreetBond150** coatings may be used to provide additional build thickness in high wear areas such as vehicle wheel paths and turning areas.



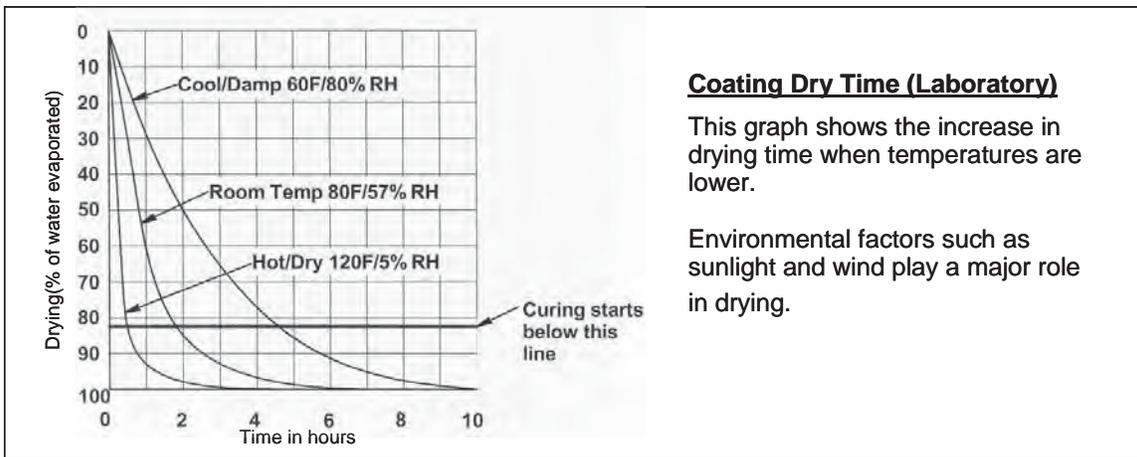
## STREETBOND150 COATED ASPHALT SPECIFICATION STAMPED (TEXTURED) SURFACE

2. A maintenance program may be required for applications exposed to:
- abrasive materials (such as salt and sand)
  - abrasive equipment (such as snow removal equipment)
  - studded winter tires

### 3.6 OPENING TO TRAFFIC

Minimally, StreetBond150 coating must be 100% dry and sufficient curing time must be allowed before traffic is permitted on the surface.

**TABLE 6: COATING DRY TIMES (TYPICAL)**



If StreetBond coatings are applied when moisture cannot evaporate, then the coating will not dry. The drying and curing of StreetBond coatings have a direct impact on performance.

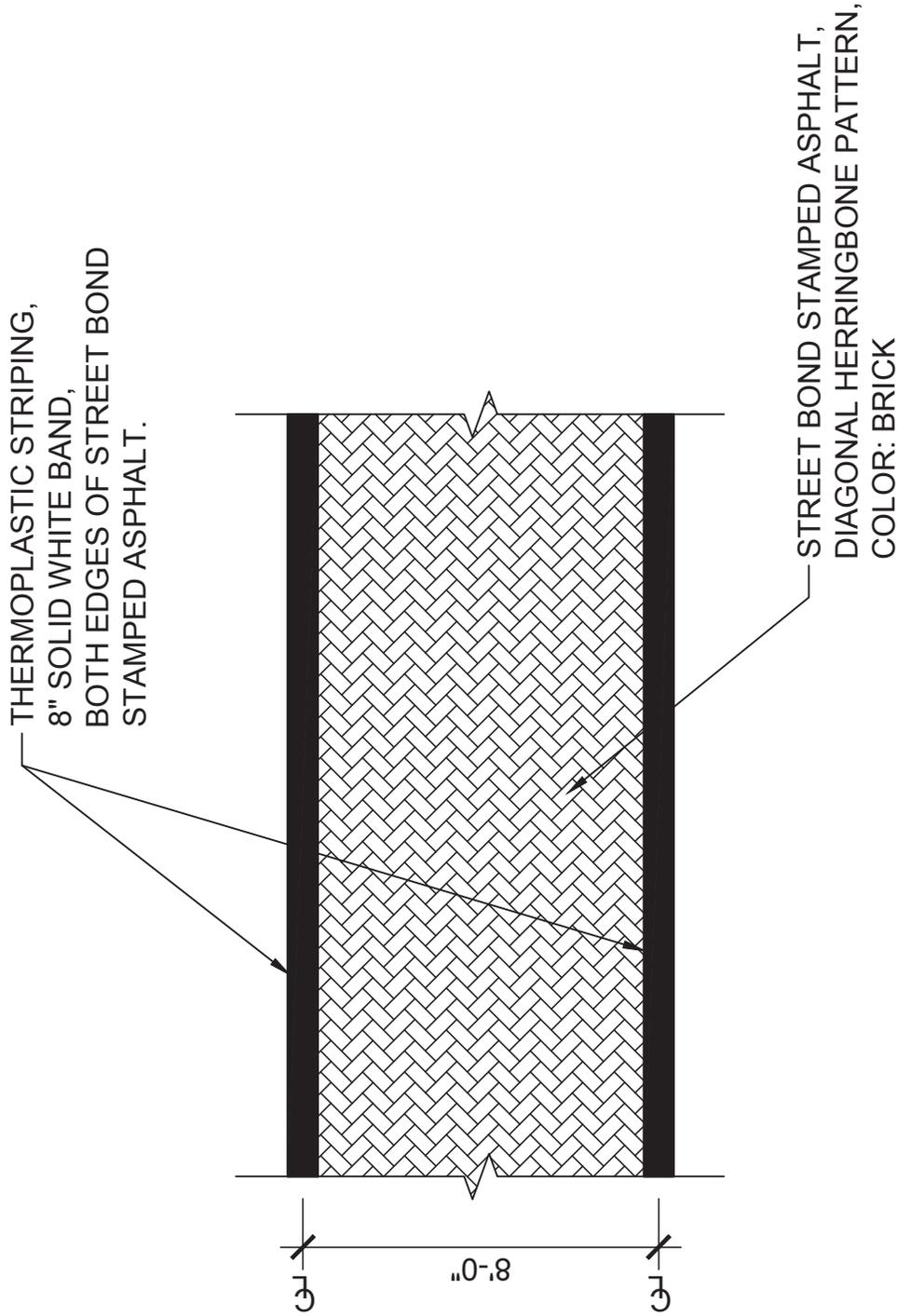
## PART 4 – MEASUREMENT AND PAYMENT

### 4.1 MEASUREMENT

The measured area is the actual area of asphalt pavement where StreetBond has been applied, measured in place. No deduction will be made for the area(s) occupied by manholes, inlets, drainage structures, bollards or by any public utility appurtenances within the area.

### 4.2 PAYMENT

Payment will be full compensation for all work completed as per conditions set out in the contract. For unit price contracts, the payment shall be calculated using the measured area as determined above.



1 STREETBOND™ PATTERN DETAIL - ACWORTH STANDARD

SCALE: 1/4" = 1'-0"

# StreetBond Standard Colors

City Standard Color



The color samples may not match exactly with their physical equivalents.  
Always refer to physical samples before making your color choices.

# GE TORCH™ II LUMINAIRE

## APPLICATIONS

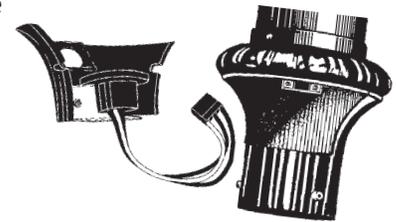
- Residential roadways, walkways, shopping centers, malls and plazas
- Historic restorations and downtown business districts

## SPECIFICATION FEATURES

### Suitable For Wet Locations

- Ornamental borosilicate glass globe:
  - aesthetically pleasing refractor for daytime and nighttime appeal
  - adds historic look
- Terminal Board standard for simplified wiring
- Twist Lock photoelectric receptacle
- Powder coat paint available in 188 RAL colors
- Crowns, ribs and finials available
  - see decorative post top accessories page A-55
- Built to /UL standards

- Ornamental heavy gage cast aluminum base
- Optional 120v Simplex receptacle available
- E39 Mogul base socket standard where lamp is available in mogul base (E26 Medium base socket otherwise)
- Luminaire shipped as components: Base, Optical
- Tool-less removable door for access to terminal board and PE receptacle
- Cast ring on globe for robust glass mounting
- Ballast mounted on plate for easy maintenance



## ORDERING NUMBER LOGIC

T2HX	10	S	1	N	1	2G	G	S	BLCK	XXX
PRODUCT IDENT	WATTAGE	LIGHT SOURCE	VOLTAGE	BALLAST TYPE	PE FUNCTION	GLOBE TYPE**	GLOBE MATERIAL	IES DISTRIBUTION TYPE	COLOR	OPTIONS
XXX	XX	X	X	X	X	X	X	X	XXXX	XXX
T2HX = Torch 2	05 = 50 07 = 70 <b>10 = 100</b> 15 = 150 (55V) 25 = 250	E = Energy Act Compliant Pulse MH (EPMH) <b>S = HPS</b> P = PMH	60Hz 0 = Multivolt <b>1 = 120</b> 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 F = 120X347	A = Autoreg <b>H = HPF Reactor or Lag</b> N = NPF Reactor or Lag	1 = None 2 = PE Receptacle	<b>2G = Torch 2 Globe</b>	<b>G = Glass</b>	<b>A = Asymmetric</b> S = Symmetric	ALUM = Aluminum <b>BLCK = Black</b> CHGR = Charcoal Gray DKBZ = Dark Bronze GRAY = Gray XXXX = RAL number	R = 120V Outlet* U = UL
<b>T2HF = Torch 2 Finial Ready</b>										

\*\*R" option for 120V unit only.

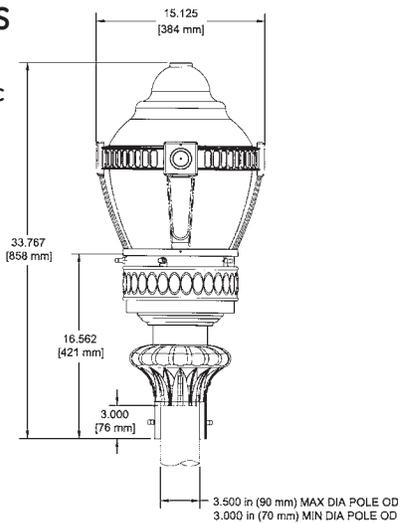
\*\*See Photometric Selection Tables starting on Page A-70.

**T2HF-10-S-1-H-2-2G-G-A-BLCK**

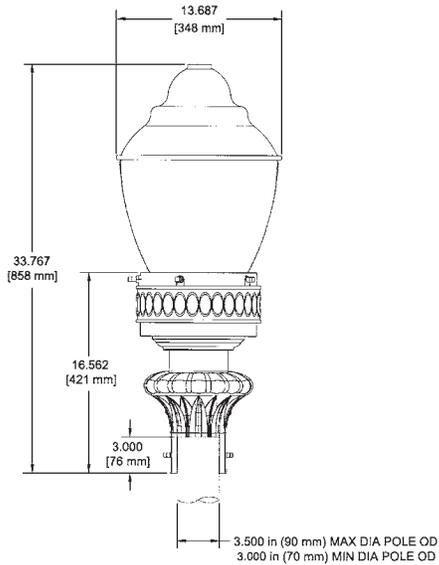
GE TORCH™ II LUMINAIRE

FIXTURE DIMENSIONS

2GG  
 Asymmetrical and Symmetric  
 Distribution available



TORCH II WITH  
 CROWN AND RIB SET



TORCH II

A  
 AREA LIGHTING



DATA

Approximate Net Weight	40-45 lbs	18-20 kgs
Suggested Mounting Height	8-16 ft.	2-4 M
Effective Projected Area:	1.48 sq ft max	0.137 sq M max

TORCH II  
 CROWN AND RIB SET

BALLAST SELECTION TABLE

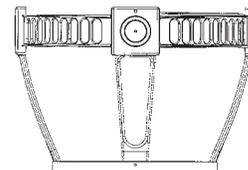
All light sources are clear unless otherwise indicated.

Wattage	Light Source	Ballast Type/ Voltage 60 Hz			
		120	347 120 x 347	Multivolt	120x240
50	HPS	H,N	H,N	H,N	N/A
70	HPS	H,N	H,N	H,N	N/A
100	HPS	H,N	H,N	H,N	N/A
150 (55v)	HPS	H,N	H,N	H,N	N/A
250	HPS	A	A	A	N/A
*70, 100	PMH	H,N	H,N	H,N	N/A
*150	PMH	H,A	H	N/A	A
250	EPMH	A	N/A	A	N/A

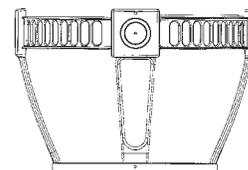
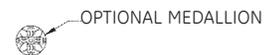
NOTE: See Photometric Selection Table starting on Page A-50

\*Medium Base Socket

Type H Ballast



CRNBBL-2G  
 SHEETMETAL



CRNBBL-T2H  
 DIECAST ALUMINUM

REFERENCES

See Page A-64 for start of Accessories.  
 See Page A-68 for Explanation of Options and Other Terms Used.  
 See Pole and Bracket Section Page P-2 for pole selection.

# STREETDREAMS™ AND DECORATIVE POST TOP ACCESSORIES

REFER TO ACCESSORY INDEX TO MATCH ACCESSORY WITH PRODUCT.  
ILLUSTRATIONS SHOWN ARE TYPICAL REPRESENTATIONS.

A  
AREA LIGHTING

## CROWN AND RIB

- SD-CR-M-BL  
Medallion
- SD-CR-S-BL  
Scroll
- SD-C-M-BL  
Crown only  
Medallion



SD-C-M-BL



SD-CR-M-BL



SD-CR-S-BL

## FINIAL

- FNLBL-ACN
- FNLBL-BLS
- FNLBL-FDL
- FNLBL-FIL
- FNLBL-SIL
- FNLBL-SPK
- FNLBL-OAK
- FNLBL-STP
- FNLBL-GTH

FNLBL-ACN  
ACORNFNLBL-BLS  
BLOSSOMFNLBL-FDL  
FLEUR-DE-LISFNLBL-FIL  
FILAGREEFNLBL-SIL  
SILHOUETTEFNLBL-SPK  
SPIKEFNLBL-OAK  
OAKFNLBL-STP  
STEEPLEFNLBL-GTH  
GOTHIC

## HOUSE & TOP SIDE SHIELD

- ILS-SD-HTS MOG
- ILS-SD-HTS MED

## HOUSE SIDE

- ILS-SD-HS MOG
- ILS-SD-HS MED



ILS-SD-HTS



ILS-SD-HS



ILS-SD-TS

## TOP SIDE

- ILS-SD-TS MOG
- ILS-SD-TS MED



SD-LVR-ASYM



SD-LVR-SYM

SD-LVR-ASYM-HS  
SD-LVR-SYM-HS

## SPILL LIGHT CONTROL LOUVER SYSTEM

- SD-LVR-ASYM
- SD-LVR-SYM
- SD-LVR-ASYM-HS
- SD-LVR-SYM-HS

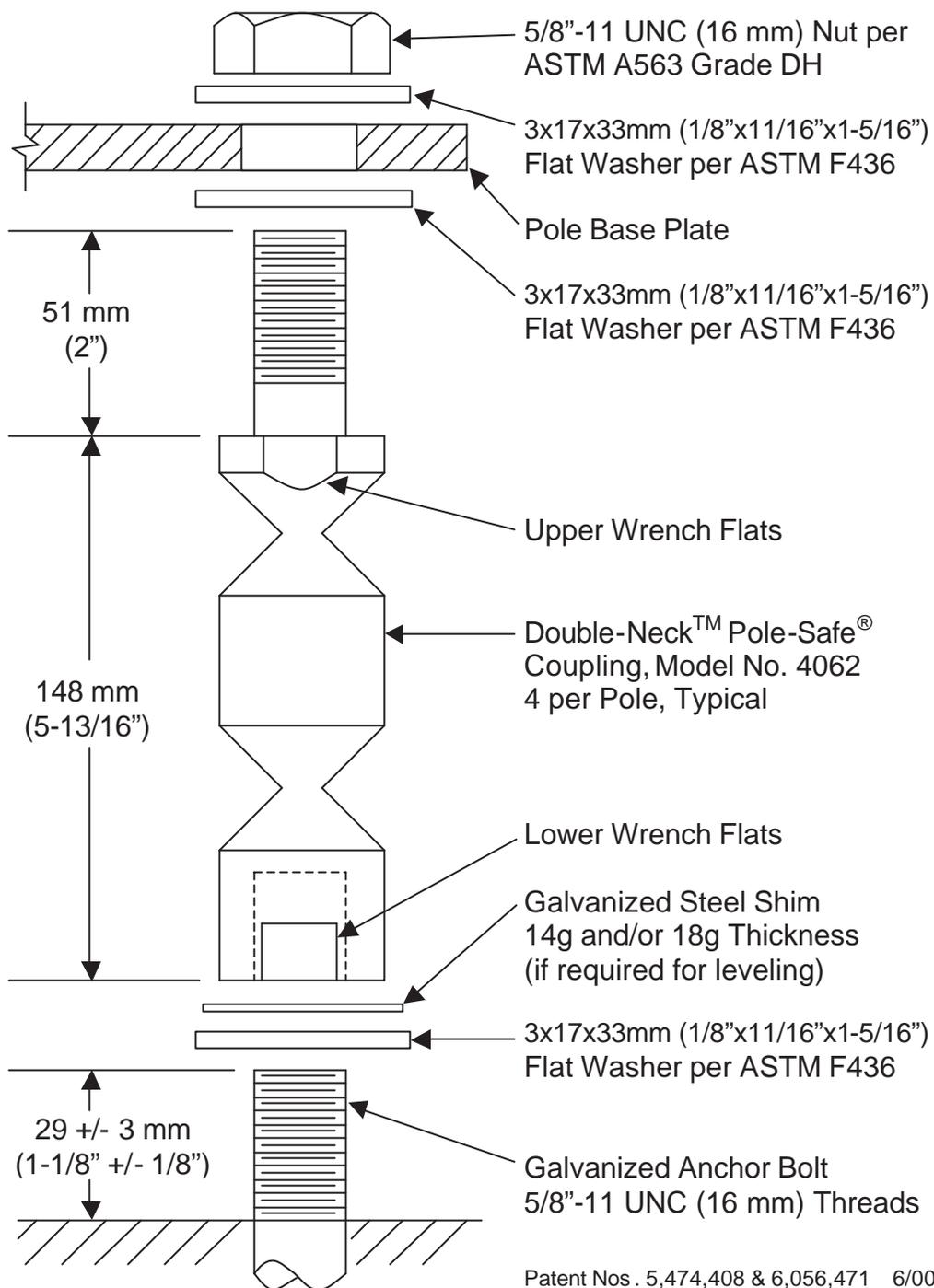


Pole-Safe® Model No. 4062  
Breakaway Support System for Light Poles

INSTALLATION INSTRUCTIONS

**NOTE:** Proper Installation is essential for the Pole-Safe Breakaway Support System to function correctly as designed.

1. Surface of foundation around anchor bolts must be smooth, flat and free of debris.
2. Existing anchor bolts MUST be sized to the proper projection height as shown on the reverse side of these instructions. Then, anchor bolts shall be cleaned, and if necessary, coated with cold galvanizing material prior to installing Pole-Safe couplings.
3. Install lower flat washers, and thread Pole-Safe couplings on to anchor bolts.
4. If needed, shims are provided for leveling of the pole base plate, and may be installed on the top and/or bottom of the couplings. No more than 2 shims shall be installed on any one coupling. For larger adjustments that may be required, install no more than one additional flat washer per Pole-Safe coupling.
5. Use lower wrench flats to tighten Pole-Safe couplings on to the anchor bolts. Secure couplings as tight as possible using conventional wrenches. Do not use a pipe wrench. Couplings must be seated squarely on the washers, and washers must be seated uniformly on top of the foundation. If necessary, remove coupling and reduce the anchor bolt projection height to allow proper seating of the couplings.
6. Install a flat washer on top of each Pole-Safe coupling, and set the pole with base plate on top of the couplings.
7. Install a flat washer and nut on to each Pole-Safe coupling extended through the pole base plate. If pole is not plumb, install shims and/or washers for proper leveling as described in Step 4 above.
8. Tighten each nut on to pole base plate. Pole-Safe couplings must be held with an additional wrench on the upper wrench flats to prevent an induced torque stress across the necked portion of the couplings. Nuts shall be tightened using the turn-of-nut method in accordance with American Institute of Steel Construction (AISC) procedures (for ASTM A325 and A490 anchor bolts, 1/3 rotation past “snug tight”).



Patent Nos. 5,474,408 &amp; 6,056,471 6/00

**SPECIFICATIONS**Performance Criteria:

1. Double-Neck™ Pole-Safe® conforms to AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals."
2. Double-Neck™ Pole-Safe® has been crash-tested and FHWA approved in accordance with the requirements of NCHRP Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features."
3. Maximum Allowable Pole Mass: Varies.

Physical Properties per Coupling:

1. Ultimate Tensile Strength = 101.9 kN (22.8 kips), minimum.
2. Tensile Yield Strength = 88.3 kN (19.8 kips), minimum.
3. Ultimate Restrained Shear Strength = 8.0 kN (1.8 kips), maximum.

Corrosion Protection:

1. All Double-Neck™ Pole-Safe® couplings, nuts, bolts, washers, and shims are galvanized after fabrication in accordance with ASTM A153.

Pole-Safe® Model No. 4062  
Breakaway Support System for Light Poles



20 Jones Street  
New Rochelle, NY 10801  
914-636-1000

Proprietary Items Request  
 PI# 0009010 Cobb County  
 November 20, 2014  
 Page 23 of 23

PART STRING  
 D90-C12/GFCI-RM-TOP/BLK

Attachment B



www.amerluxexterior.com  
 5220 SHANK ROAD PEARLAND, TX. 77581  
 PHONE:(281)997-5400 FAX:(281) 997-5441  
 TOLL FREE: (800) 364-0098

Q# 33620 S# P#  
 Date 08-29-12

REQUEST #  
 33620

NAME:  
 City of Acworth

LIGHT DISTRIBUTION

- TYPE III REFRACTIVE       SPECIFY  
 TYPE V REFRACTIVE        
 STANDARD SYMMETRICAL  
 TYPE III REFLECTOR  
 TYPE V REFLECTOR

FINISH

- TBK TEXTURED BLACK  
 BLK SMOOTH SATIN BLACK  
 GRN GREEN       SPECIFY  
 GTG GRANITE GREEN        
 WHT WHITE  
 ATC ANTIQUE COPPER       STD.Color  
 CLB CLASSIC BRONZE        
 CUSTOM COLOR RAL 7003

VOLTAGE

- 120       277       SPECIFY  
 208       MULTITAP        
 240       480

MH: Metal Halide      PL&CF: Compact  
 HPS: High Pressure Sodium      Fluorescent

LIGHT SOURCE

- 50MH       50HPS       SPECIFY  
 70MH       70HPS        
 100MH       100HPS  
 150MH       150HPS  
 175MH-PS       250HPS  
 250MH-PS       INCANDESCENT  
 PL 13  
 CF    26    32    42  
 IL135

GENERAL:

EXTERIOR HARDWARE WILL BE STAINLESS STEEL.  
 ELECTRICAL COMPONENTS WILL BE ETL LISTED "SUITABLE FOR WET LOCATIONS."

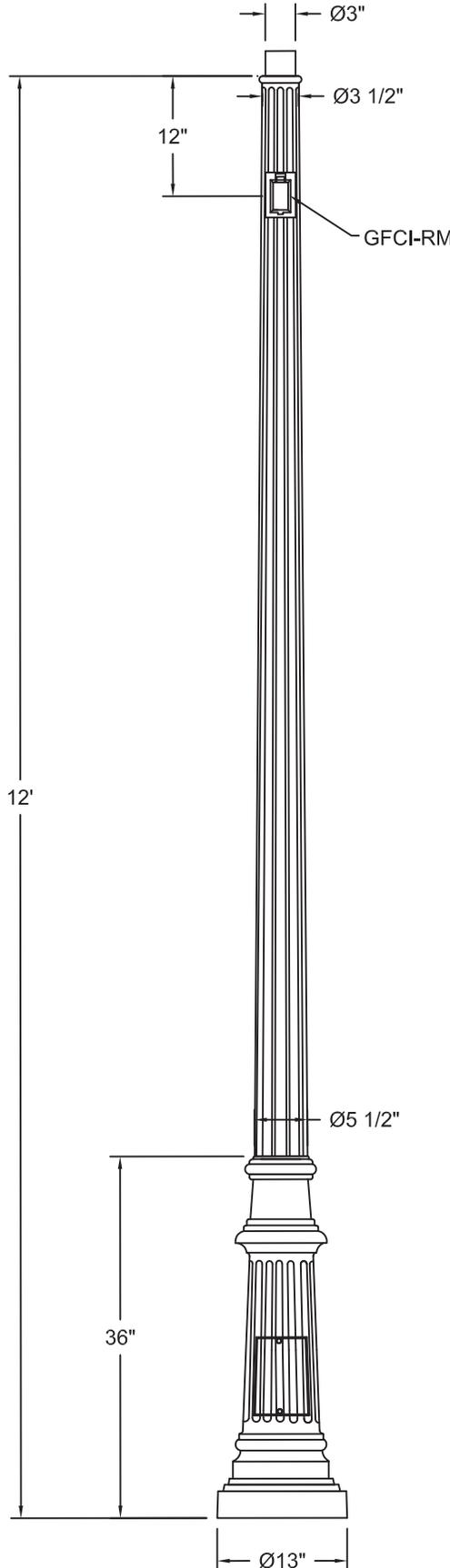


DRAWN BY

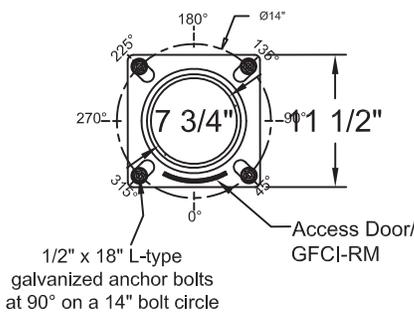
JJS

NOTES:

THIS DRAWING SHOULD ACCOMPANY YOUR ORDER.      THANK YOU.



Orientation/Anchor Guide  
 (AS VIEWED FROM ABOVE)



POLE DETAILS

Shaft  
 Ø5 1/2" to Ø3 1/2" Fluted Aluminum .250  
 Min. Wall  
 Cast Aluminum (A319 Alloy)  
Base  
 Cast Aluminum (A319 Alloy)  
Finish  
 Powder Coat

NOTICE:

THIS DRAWING IS FOR REFERENCE ONLY.  
 CHECK FOR LATEST REVISION PRIOR TO ORDERING.

Approved By \_\_\_\_\_