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2/15/17

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MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting.

1. General Information	
Name of Person Submitting Request : Forrest Higginbotham	
Department/Office Building Services	Phone # (Office) 904-8049
MTSU Box # 32	Phone # (Cell)
E-mail: forrest.higginbotham@mtsu.edu	Submittal Date: 02/14/17

2. Project Categories (Select One)	
Select the category that best describes the project.	
<input checked="" type="checkbox"/>	Energy Conservation/Efficiency
<input type="checkbox"/>	Sustainable Design
<input type="checkbox"/>	Alternative Fuels
<input type="checkbox"/>	Other
<input type="checkbox"/>	Renewable Energy

3. Project Information
<p>a. Please provide a brief descriptive title for the project.</p> <p>b. The project cost estimate is the expected cost of the project to be considered by the committee for approval, which may differ from the total project cost in the case of matching funding opportunities. Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</p> <p>c. List the source of project cost estimates.</p>
3a. Project Title: Walker Library 2 nd floor Women's Restroom Toilet and Flush valve replacement (Phase I)
3b. Project Cost Estimate: \$9,019.41
3c. Source of Estimate: Equipment manufacturer and RSMeans estimating data.

4. Project Description

(Completed in as much detail as possible.)

- a. The scope of the work to be accomplished is a detailed description of project activities.
- b. The benefit statement describes the advantages of the project as relates to the selected project category.
- c. The location of the project includes the name of the building, department, and/or specific location of where the project will be conducted on campus.
- d. List any departments you anticipate to be involved. Were any departments consulted in preparation of this request? Who? A listing may be attached to this form when submitted.
- e. Provide information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
- f. Provide any additional comments or information that may be pertinent to approval of the project funding request.

4a. Scope: Work to be accomplished:

By replacing (10) existing toilets with manual flush valves with (10) high efficiency toilets and automatic flush valves, it is anticipated to reduce water usage and the need for service from custodial and maintenance.

4b. Scope: Benefit Statement

The current toilets are original to the building and not high efficiency, requiring additional water to operate. The flush valve and bowl must be compatible with each other for efficient usage or the result is over flushing, potential for blockage, and increased custodial service. The 1.6 gallon per flush automatic flush valves with override button will also reduce the contact the user will have with potentially contaminated handles.

4. Project Description (continued)

4c. Location of Project (Building, etc.)

Walker Library 2nd Floor Women's restroom.

4d. Participants and Roles

Building Services personnel to purchase and install.

4e. Future Operating and/or Maintenance Requirement

It is the expectation Maintenance involvement will decrease from current reports for service.

4f. Additional Comments or Information Pertinent to the Proposed Project:

5. Project Performance Information

Provide information if applicable.

- a. Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
- b. Provide information on estimated annual energy cost savings in monetary terms.
- c. Provide information on any annual operating or other cost savings in monetary terms. Be specific.
- d. Provide information about any matching or supplementary funding opportunities that are available. Identify all sources and explain.

5a. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.) Each toilet = 3.5 gallons per flush X 10 = 35 gallons per single use.

$3.5 \text{ gal per flush} / 1.6 = 2.19 \text{ gal per flush saved.}$

5b. Annual Energy COST Savings (\$).

Annual savings is dependent on usage.

5c. Annual Operating or Other Cost Savings. Specify. Additional operating costs are unknown at this time. Future phases may be requested pending the results.

5d. Matching or Supplementary Funding (Identify and Explain).

Unknown.



Highline® Elongated Toilet Bowl K-4405

Features

- Vitreous china.
- Elongated bowl.
- 10" (254 mm) or 12" (305 mm) rough-in.
- 1-1/2" top spud.
- 2-1/4" (57 mm) passageway.
- 11" (279 mm) x 9" (229 mm) water area.
- 1.28 gpf (4.8 lpf) or 1.6 gpf (6.0 lpf) depending on flushometer specified.
- 28-1/4" (718 mm) x 14-7/8" (378 mm) x 17-1/8" (435 mm).

Optional Accessories

K-13516 Manual 1.6 GPF WC Flushometer
K-13517 Manual 1.28 GPF WC Flushometer
K-10673-SV WAVE DC 1.28 GPF WC Flushometer
K-10956-SV Tripoint™ DC 1.28 GPF WC Flushometer
K-10957-SV Tripoint™ DC 1.6 GPF WC Flushometer
K-4654-A Commercial Toilet Seat
K-4670-CA Commercial Toilet Seat
K-4731-C Commercial Heavy-duty Toilet Seat
K-4731-SC Commercial Heavy-duty Toilet Seat
K-10956 Tripoint™ DC 1.28 GPF WC Flushometer

Components

Additional included component/s: Spud, and Bolt cap accessory pack.



ADA CSA B651

Codes/Standards

ASME A112.19.2/CSA B45.1
DOE - Energy Policy Act 1992
ADA
ICC/ANSI A117.1
CSA B651

KOHLER® One-Year Limited Warranty

See website for detailed warranty information.

Available Color/Finishes

Color tiles intended for reference only.

Color	Code	Description
	0	White
	96	Biscuit
	47	Almond
	7	Black Black™

USA/Canada: 1-800-4KOHLER (1-800-456-4537)

Kohler Co. reserves the right to make revisions without notice to product specifications.

For the most current Specification Sheet, go to www.kohler.com.

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THE BOLD LOOK
OF **KOHLER**®

Illustrated Parts

Battery Powered Exposed Type Flush Valve

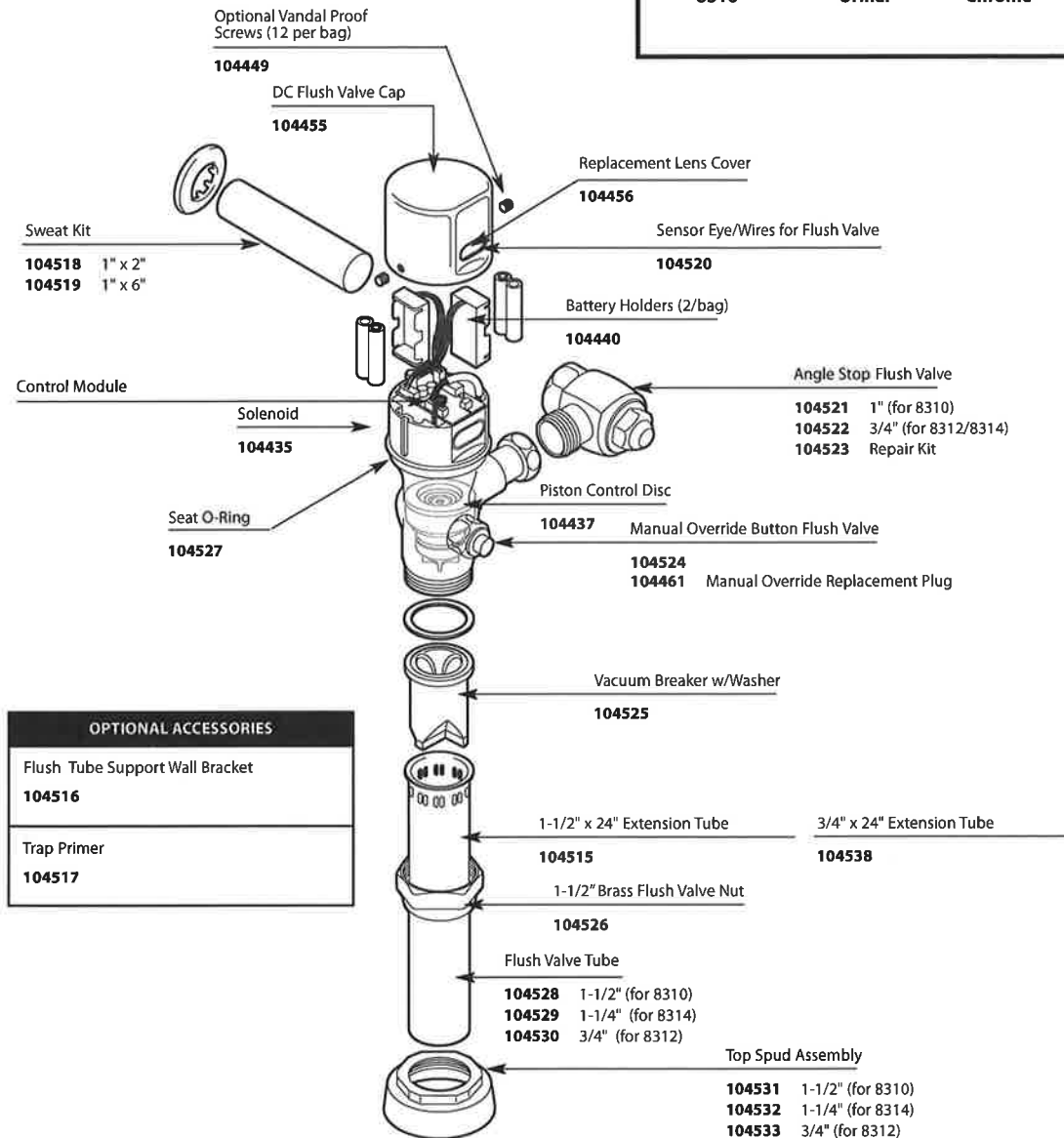
MODEL

8310DF16
8310RDF16
8316

Closet
Closet
Urinal

FINISH

Chrome
Chrome
Chrome



OPTIONAL ACCESSORIES

Flush Tube Support Wall Bracket

104516

Trap Primer

104517

Environmental Product Declaration Highline® K-4405

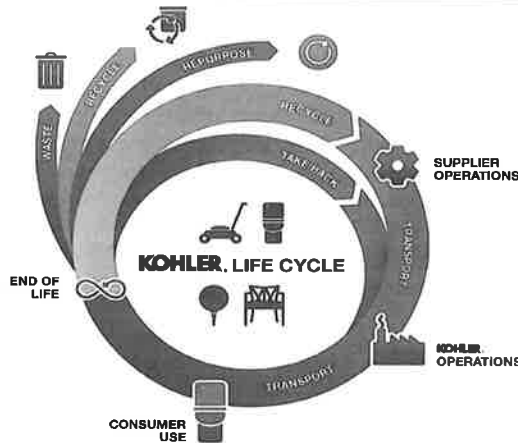
Vitreous Sanitary Ceramic Ware

THE BOLD LOOK OF KOHLER®



According
to
ISO 14025

This document is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycles. At Kohler, we believe that the path to a better place is a constant endeavor. Our Design for Environment program, embedded within the Kohler New Product Development culture, considers environmental impact at each stage of a product's existence - from the activities of our suppliers through the end of the product's useful life. When we design products with the environment in mind, we believe that every choice counts.



PROGRAM OPERATOR	UL Environment
DECLARATION HOLDER	Kohler
DECLARATION NUMBER	4786429138.117.1
DECLARED PRODUCT	Highline® K-4405
REFERENCE PCR	PCR for Building-Related Products and Services. Adapted for UL Environment from the range of Environmental Product Declarations of Institute Construction and Environment e.V. (IBU). Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report. Part B: Requirements on the EPD for Sanitary Ceramics
DATE OF ISSUE	16-Oct-14
PERIOD OF VALIDITY	5 Years
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacturing Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications
The PCR review was conducted by	The Independent Expert Committee, SVR
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	 UL Environment
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by	 Thomas Gloria, Life-Cycle Services, LLC

1 Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds, e.g., Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.
 Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

Environment

