

# TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104  
Phone No. (512) 322-2212 Fax No. (512) 463-6693

---

## PRODUCT EVALUATION

Effective October 1, 2012

RV-74

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **October 2016**.*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.*

**Models USGF Galvanized Steel Exhaust Ventilating Fan** manufactured by

**Greenheck Fan Corporation**  
**400 Ross Avenue**  
**Schofield, Wisconsin 54476**  
**(715) 359-6171**

will be acceptable for use in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The following Greenheck Fan Corporation Roof Exhaust and Grease fans are included and part of the evaluation:

**USGF** – Fan is designed specifically for heavy grease exhaust applications as found in char broilers, solid fuel cooking, and Oriental cooking. Entire unit is constructed of heavy gauge steel and have centrifugal backward inclined steel wheels. Unit includes; clean-out port, non-stick coated wheels, heat baffle, and Nema-3R disconnect switch.

## LIMITATIONS

All roof exhaust and grease fans shown in this evaluation are to be installed on flat roofs. Positive drainage is required in all cases.

**TABLE 1: Model, Sizes, and Design Pressures**

MODEL	Size	DP (psf)
USGF	140, 160, 180, 200HP	±130

**Impact Resistance:** The **USGF** units satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the Inland I zone and the Seaward zone. The roof exhaust fans passed Missile Level D specified in ASTM E 1996-05. The units may be installed at any height on the structure as long as the design pressure rating for the units is not exceeded.

## INSTALLATION INSTRUCTIONS

### **General Installation Requirements:**

All requirements specified in the International Residential Code (IRC) and the International Building Code (IBC) must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**Design Drawings:** The USGF steel rooftop fans shall be installed in accordance with Greenheck USGF-140 thru 200, sheets 1-5 of 5, HSS5001-HSS5005, dated March 30, 2012, signed and sealed by L. David Rice, P.E. on August 15, 2012.

**Framing:** The fans may be anchored to curbs or decks to the following types of construction:

- Steel (minimum 12 gauge or  $\frac{1}{8}$ " thick steel member).
- Concrete (minimum compressive strength of 3,000 psi).

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.