

Haag Engineering Co. 1410 Lakeside Parkway, #100 Flower Mound, Texas 75028

Haag Research & Testing Co. (HRT) is accredited through the International Accreditation Service (IAS) to perform various tests, including tests on roofing products that evaluate hail impact resistance and resistance to wind effects. These include:

ANSI FM 4473, January 2011 - Test Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls

UL 2218, Second Edition, January 25, 2010 - Standard for Impact Resistance of Prepared Roof Covering Materials

ASTM D3161-20 - Standard Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan-Induced Method)

A manufacturer of roofing products can have their products tested by the HRT laboratory in accordance with one or both of these standards to achieve an impact class rating or a wind rating and have their products entered into the HRT Quality Control Program (HRT-QCP).

Entrance into the HRT-QCP requires products to be tested by the HRT laboratory and successfully achieve a class rating. A comprehensive laboratory report will be issued to document the testing. A retesting schedule will be established for each product in the program to ensure their performance remains satisfactory at their tested class level. Tested products need to bear trackable identification (batch numbers, dates, etc.) for inclusion into the HRT-QCP.

Products need to undergo retesting at three-year intervals, provided:

- 1. No changes to product design
- 2. No changes to product installation instructions
- 3. No changes to product material composition
- 4. No changes to product manufacturing procedures/techniques

Any products manufactured three years after the issuance of the most recent test report are no longer considered to be certified by HRT unless additional duplicate and/or updated products have been received by HRT for re-certification.

## Disclaimer:

Haag Research & Testing Co. makes no warranties whatsoever, whether expressed or implied regardless of active or inactive status in the HRT-QCP including, but not limited to any results obtained from the services. Products listed in the HRT-QCP are certified as having achieved the certified rating, but does not guarantee product performance during weather events due to circumstances that arise outside of controlled laboratory testing, including installation quality, weathering effects, etc.