

# RICOWI, Inc.

Roofing Industry Committee on Weather Issues, Inc.

*Leading the Roofing Industry through Collaboration*



# ANTITRUST POLICY STATEMENT FOR SPRAY POLYURETHANE FOAM ALLIANCE MEETINGS

- ▶ It is and shall remain the policy of the Spray Polyurethane Foam Alliance ("SPFA"), and it is the continuing responsibility of every SPFA member company, SPFA meeting or event participant, as well as SPFA staff and leadership to comply in all respects with federal and state antitrust laws. No activity or discussion at any SPFA meeting or other function may be engaged in for the purpose of bringing about any understanding or agreement among members to (1) raise, lower or stabilize prices; (2) regulate production; (3) allocate markets; (4) encourage boycotts; (5) foster unfair or deceptive trade practices; (6) assist in monopolization; or (7) in any way violate or give the appearance of violating federal or state antitrust laws.
- ▶ Any concerns or questions regarding the meaning or applicability of this policy, as well as any concerns regarding activities or discussions at SPFA meetings should be promptly brought to the attention of SPFA's Executive Director and/or its legal counsel.



# 1989

- ▶ .97 gal gas
- ▶ Berlin Wall tumbles
- ▶ Microsoft introduces Office Suite
- ▶ Dow Jones - 2,753

## ▶ AND

- ▶ September 22, 1989 Hurricane Hugo causes \$7 billion in damages



# Hugo brought people together

- ▶ Disaster relief and assistance from all over the world
- ▶ AND
- ▶ ORNL
- ▶ Education
- ▶ Insurance
- ▶ Industry Organizations



# 27 years later:

Evolved to not only Hurricane Investigations

Seminars

Webinars

Hail Investigations

Underlayments

Code

Moisture Control / Green

Best Practice

Roof Calculator Project with ORNL



# Board Members

- ▶ Asphalt Roofing Manufacturers Association (ARMA)
- ▶ Cedar Shake and Shingle Bureau (CSSB)
- ▶ EPDM Roofing Association (ERA)
- ▶ Insurance Institute for Business & Home (IBHS)
- ▶ International Staple, Nail Tool Association (ISANTA)
- ▶ Metal Building Manufacturing Association (MBMA)
- ▶ Metal Construction Association (MCA)
- ▶ National Research Council of Canada (NRCC)
- ▶ RCI, Inc.
- ▶ Spray Polyurethane Foam Alliance (SPFA)
- ▶ SPRI
- ▶ Tile Roofing Institute (TRI)
- ▶ Two Affiliate Member Representatives



# Membership

- ▶ Nonprofit organization
- ▶ Sponsor Members
- ▶ Affiliate Members
- ▶ Education Members



# Affiliate Members

- ▶ Interested in the science of roofing, involved in roofing
- ▶ Represent industries involved in roofing





# Learning Opportunities

- ▶ Seminars
- ▶ Tours
- ▶ Committee Meetings
- ▶ Research Teams



# Opportunities to Learn: Seminars:

- ▶ Topics of current interest
- ▶ Solar
- ▶ Underlayment
- ▶ Fasteners
- ▶ Moisture
- ▶ Green
- ▶ Wind
- ▶ Hail
- ▶ Next one: March 16-17, 2017 Anaheim, CA - Focus: Underlayments, Fasteners and and Best Practice.



Opportunities to  
learn

# Tours

- ▶ Oak Ridge National Laboratory  
Oak Ridge, TN
- ▶ National Center for Atmospheric  
Research- Boulder, CO
- ▶ University of Florida, Gainesville /  
Wind Research
- ▶ Insurance Institute for Business &  
Home Safety (IBHS), Chester, SC
- ▶ CPS, Inc. and University of Colorado  
Ft. Collins, CO
- ▶ FM Global
- ▶ National Research Council Canada,  
Ottawa Canada
- ▶ 2017: Wall of Wind, Miami FL and  
potential Hurricane Center



# Opportunities to Learn: Committees

## ► Underlayment

Synthetic, Organic, Self-adhering, and other.

Address gaps in code, research, guides or testing standards to clarify underlayments role in the roofing envelope

## ► Code:

Monitor code activity related to roofs

## ► Moisture Control/Green

Id roof metrics and research needed regarding vegetative, pv, moisture, and wind turbines

## ► Best Practice

In cooperation with the Insurance Institute for Business & Home, developing best practice manuals in all roofing types.

### ➤ Hail Investigation Committee

Oversight of the research

### ➤ Wind Investigation Committee

Oversight of the research



# Best Practice Committee

Opportunity to Learn!!!!!! Producing the BEST manual of industry Best Practices.  
Demo at spring 2017 seminar!



# Opportunities to Learn Research Investigation Teams

- ▶ Hail Investigations
- ▶ 2004 OKC
- ▶ 2011 Dallas - Fort Worth
- ▶ 2016 Northeast Dallas/Metroplex



# Hail Investigation Program

- ▶ The objective of this program is to investigate the field performance of roofing assemblies after major hail events, to factually describe roof assembly performance and modes of damage, and to formally report the results for substantiated hail events.
- ▶ Unbiased reporting
- ▶ Volunteers
- ▶ Funded through donations
- ▶ Reports are available at no cost on [www.ricowi.com](http://www.ricowi.com)



## Hail Research Investigation

Prior:

- Weather is monitored through the season
- Team members sign up online or at RICOWI events
- HIP Committee meets formally 2 x year

Event is identified

- ▶ Teams are assembled, badged and provided info to report
- ▶ Teams are balanced to provide unbiased reporting
- ▶ Approvals are secured from city
- ▶ Training on day 1: How to capture info, safety
- ▶ In the field days 2-5
- ▶ Reports are entered on data base form daily
- ▶ Final report is reviewed by technical experts and Board prior to publishing.







Hail hit



















Overview of impact repairs on coated membrane with damage.







Hail Impact divots in BVR roof.



# Learnings

- Findings are formally reported and available at no cost online:  
[www.ricowi.com](http://www.ricowi.com)



# Opportunity to Learn

## *Hurricane Investigations*

Charlie  
Ivan  
Katrina  
Ike



- Our Mission is too find out what roofs are damaged and how the damage is initiated in high winds.
- The product manufacturers and installers need to determine how the damage can be prevented



Volunteer teams - unbiased

Donations fund research

Reports available at no cost online  
at [www.ricowi.com](http://www.ricowi.com)

[www.ricowi.com](http://www.ricowi.com): Reports



Team members are wind engineers, roofing material specialists, insurance analysts, engineers, or roofing consultants.

Team assignments are based on members' fields of expertise; all act as observers but are also assigned specific jobs - Report Writer, Data Recorder, Photographer, Sample Collector.

Teams are balanced by assigning 2 manufacturing members with 2 members from academia, the insurance industry, consulting firms, or other non-manufacturer associations.

Teams members carry badges to assist in gaining access to damaged areas .

## Team Members



## Wind Research Investigation

WIP Committee monitors weather conditions during the season

Team members are recruited all year

\*Always looking for volunteers

- ▶ Event is called
- ▶ A flyover is done to canvas the damage area
- ▶ FEMA approval for access
- ▶ Teams are assembled, badges, and told to report within 72 hrs of the event
- ▶ Training day 1, and onsite days 2- 5
- ▶ Reports done nightly
- ▶ Report is reviewed by technical experts, Board reviews and it is published.
- ▶ It is hoped that the report is used by code officials, manufacturers, and contractors to improve the roof system.



Shingle tabs lifted and tore from 6 nails per pc.



























Please join us!

- ▶ Next Seminar and Committee Meetings: March 16-17, 2017 Anaheim
- ▶ Fall Seminar and Committee Meetings and Tour: November 2-3, 2017 Miami
- ▶ As a Member
- ▶ As a Sponsor





Please consider getting involved  
with RICOWI and help Make a  
Difference in the Roofing  
Industry!

Thank you!

