# The Path to a Greener Roof

### Duro-Last® and NSF/ANSI 347

The roof is a huge part of any building project, and as the imperative for "greener" buildings grows, there is greater pressure to find an environmentally sustainable roof. But sustainability for membrane roofs had never previously been quantified.





- Volatile Organic Compounds (VOCs) released by the material or its installation
- Energy savings of the roofing system
- Recyclability of the raw material

But there was no objective composite score.

Duro-Last did well in all three areas. But there was no way to comparison to other products!



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Corporate

Governance

to its stakeholders?

and designers

Good employer

A good corporate citizen

Is the manufacturer responsible

Training and outreach for installers

## Product

**During the manufacturing** 

- Conservation of water
- Protection of clean air
- Pieces of off-spec membrane are used to make prefabricated roof accessories

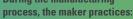
Scrap is recycled back into production

Leftover material is reground to produce

**Recycling Manufacturing Scrap** 

resilient commercial flooring





- Conservation of energy
- Material waste



New standard developed by major standards organizations (NSF, ANSI) with roofing industry stakeholders:

- Architects
- Roofing consultants
- Engineers
- Non-government organizations
- Manufacturers

Based on total life cycle, NSF 347 quantifies and documents sustainable qualities of each membrane roofing material:

- Polyvinyl chloride (PVC)
- Thermoplastic polyolefin (TPO)
- Ethylene propylene diene terpolymer (EPDM)
- Ketone ethylene ester (KEE)
- Polyisobutylene (PIB) products



**RECYCLED** 

### TOTAL LIFE CYCLE

From raw material to disposal, NSF 347 rates each product in five different areas:







The membrane is made from environmentally sustainable raw material:

- Minimal chemicals of concern
- Informed selection of suppliers

Innovation

awarded for: • Reduced water consumption and

introduced new technology, • Reduction of energy consumption or added sustainability value • Investment of capital in renewable

to old technology? Points energy at manufacturing plant

Has the company

Increasing environmentally

minimization of waste materials

Reclaims post-consumer

#### Membrane Durability

How long will it last? The roof's service life is a key factor. It is measured by:

- Quality control measures
- Demonstrated durability in the field
- How much the material itself contributes to durability

For true sustainability, service life in the field is key. Two quality control measures must be in place:



- Documented installer training program



For more information about NSF/ANSI 347 and Duro-Last's Platinum certification, visit duro-last.com/sustainability or contact us at 866-735-8824.



