



*The Smart Solution for Rooftop Ice & Snow Management*

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# Get peace of mind with the #1 solution for winter rooftop protection

## Safe, Simple, Reliable

Floe is the safe solution for ice and snow mitigation. It has no high-power electrical systems on the roof and eliminates the need for workers to risk their lives on dangerous icy surfaces.

Floe can be easily set up by any roofer or contractor. Once installed, it operates completely autonomously, and will provide notifications to your devices in case of alerts. It provides asset protection and peace of mind all winter long.

Floe's technology was spun out of MIT and Yale and was tested with the US Army Corp of Engineers' Cold Regions Research Engineering Lab. The product has been validated in some world's most extreme winter conditions. It is trusted by the best across the USA and Canada.



### Plug & Play

Simply plug in the controller into a 120V outlet, and the system is ready to go. No electrician or specialist needed— Floe is fast & easy!

### Modular

Easily adaptable across building types, sizes, and materials to address a range of ice and snow issues.

### Built to Last

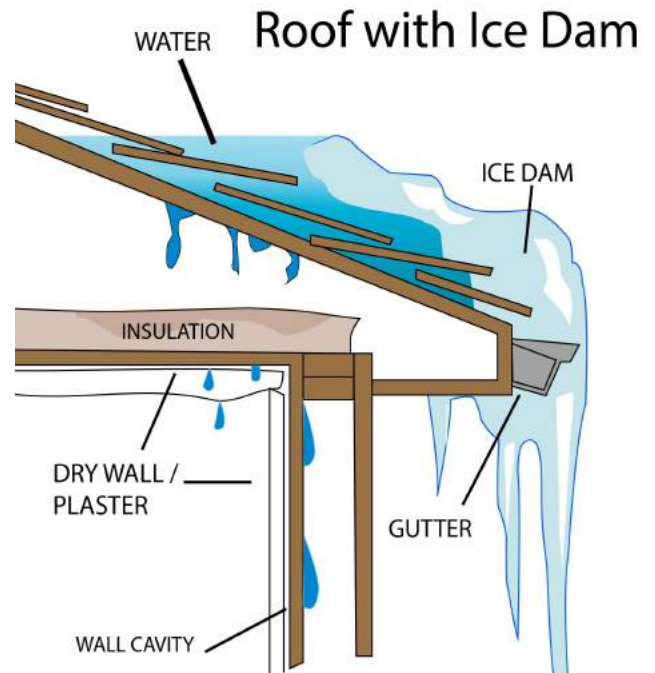
Floe is dedicated to providing high-quality products that are designed to last 10+ years.



# The pains of rooftop ice and snow buildup

Rooftop ice buildup can cause melted snow to pond, which often results in disastrous leaks inside the building

- ❑ Pitched roofs: ice dams can form on the roof's edge and prevent melted snow from discharging
- ❑ Flat roofs: ice can freeze over drains, gutters, and downspouts



Rooftop ice buildup can cause dangerous icicles, frozen access hatches, and slippery walkways below



Rooftop snow buildup can cause excessive loading and catastrophic roof collapse



# Traditional solutions have critical shortcomings



## Thermoelectric Systems

### Ineffective

They allow snowmelt to refreeze, which results in:

- ☐ Dangerous icicles
- ☐ Burst downspouts
- ☐ Frozen walkways

### Unappealing

- ☐ Fire & electrocution risk
- ☐ Burns through roofing materials
- ☐ Aesthetically unattractive

### Troublesome

- ☐ Difficult to monitor and fail without notice
- ☐ High electrical costs
- ☐ Unsustainable energy use
- ☐ Expensive specialists for installation and maintenance



## Ice and Snow Removal Services

### Labor-Intensive

- ☐ Hard to schedule after major storms
- ☐ Can take valuable time to organize in emergency scenarios
- ☐ Limited on nights and weekends
- ☐ Very expensive

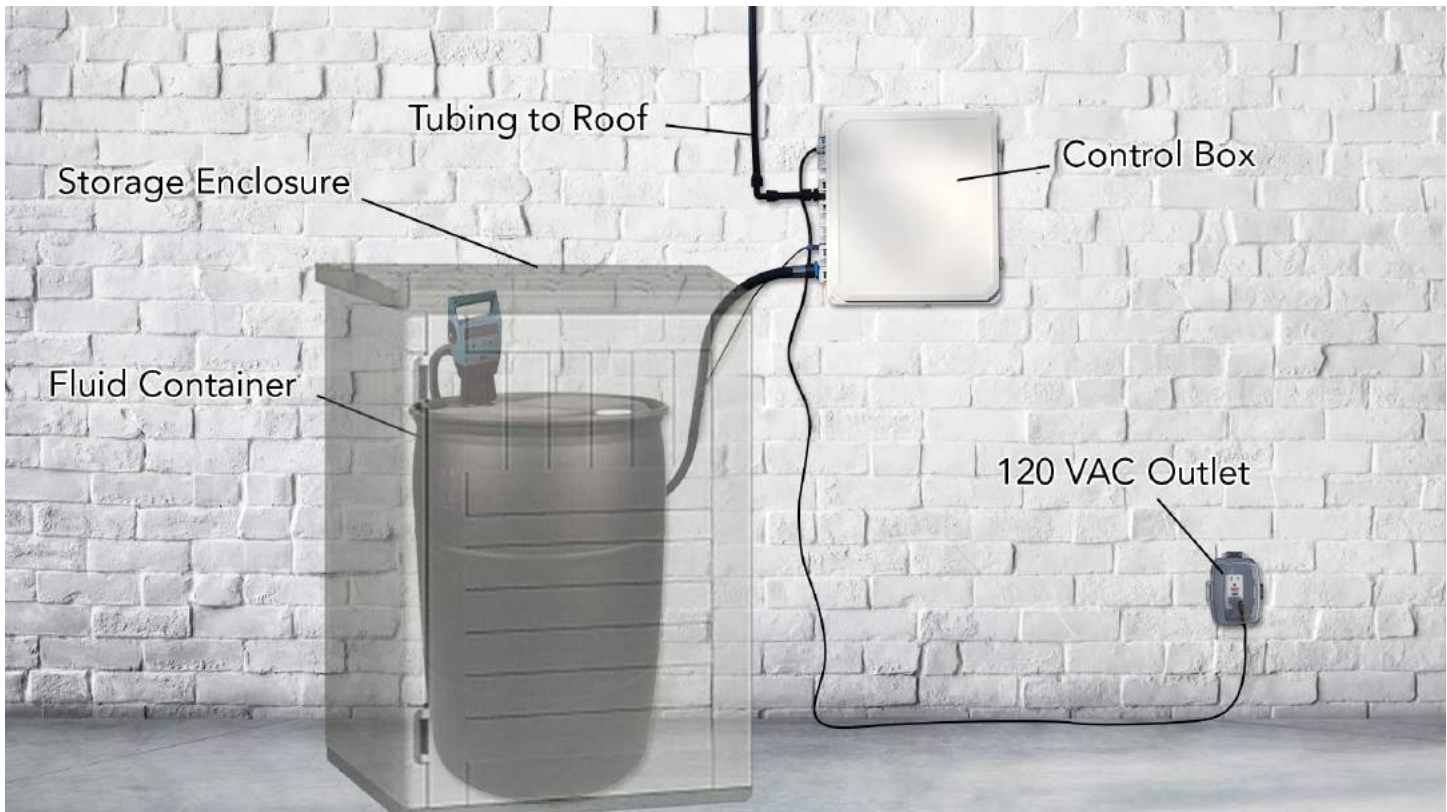
### Precarious

- ☐ Significant liability risk for workers
- ☐ Often results in significant roof damage
- ☐ Unsustainable

# Choose Floe: Smart, Simple, Durable

The patent-protected technology leverages sensors, proprietary machine learning algorithms, and real-time weather data to predict and detect ice and snow buildup.

When necessary, the Floe system deposits an eco-friendly deicing fluid onto the roof to address the ice and snow. Floe Deicer is non-corrosive, non-toxic, biodegradable, and pet/plant safe.



## Plug-&-Play Control Box

- ✓ Ships ready-for-use and does not require any programming
- ✓ No electrical work - plugs into a standard 120V outlet
- ✓ Built-in Wi-Fi and cellular connectivity
- ✓ Provides instant notifications for alerts (e.g. low fluid)

## Modular Tubing System

- ✓ Tailored to each building
- ✓ Easily installed with no specialized tools or training
- ✓ Can be left installed year-round for 10+ years
- ✓ Non-penetrating fasteners do not void roof warranties
- ✓ Invisible from the ground and preserves the facade

## Deicer Cartridge

- ✓ Non-corrosive, pet & plant safe, biodegradable
- ✓ Active to -76° F (-60° C)
- ✓ Easily stored for years
- ✓ Designed to be replaced once a season
- ✓ Can be easily replaced in less than 5 minutes

# Universal Compatibility

Floe has broad applications across various roof types, materials, and sizes

## Building Types

- ✓ Commercial
- ✓ Healthcare Facilities
- ✓ University
- ✓ Governmental
- ✓ Industrial
- ✓ Multi-family residences
- ✓ Homes & lodges

## Pitched

- ✓ Asphalt shingles
- ✓ Slate tile
- ✓ Wooden shingles
- ✓ Metal (e.g. aluminum, copper)

## Flat

- ✓ Membrane (e.g. EPDM, PVC, TPO)
- ✓ Modified bitumen
- ✓ Tar and gravel

Accelerated life testing with common roofing materials have revealed no detrimental effects

A Floe system can cover up to **450 ft of pitched roof edge** or **500,000 sqft of flat roof** (20 drains)





# Floe is the Sustainable Solution

## Safe and Eco-Friendly Deicer

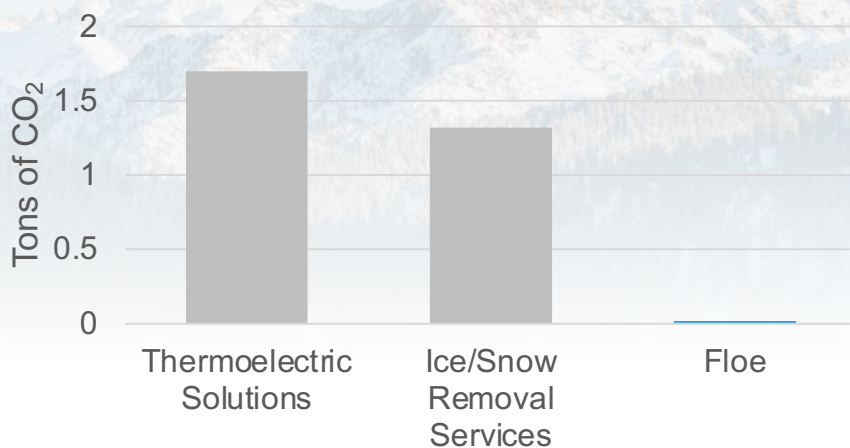
- ✓ Non-Corrosive
- ✓ Non-Flammable
- ✓ Pet & Plant Safe
- ✓ Biodegradable
- ✓ Non-Toxic
- ✓ Transparent
- ✓ Active to -76F
- ✓ Easily stored for years

Full SDS available upon request

## Energy Efficient

- ✓ Floe reduces energy use by **>99%**
  - ✓ Consumes less energy than a single light bulb
- ✓ Translates to significant cost savings
- ✓ Floe supports solar and renewables transition by reducing energy load

### Annual CO<sub>2</sub> Emissions Per Building



# Floe Deicer™ Cartridges

Floe Deicer™ ships in standard 55-gallon drums and 265-gallon totes



## Storage

- ✓ Cartridges are UV stabilized and weather resistant for outdoor storage
- ✓ Cartridges can be stored indoors or in a shed for aesthetics and security
- ✓ Multi-year shelf life and does not require agitation or re-mixing



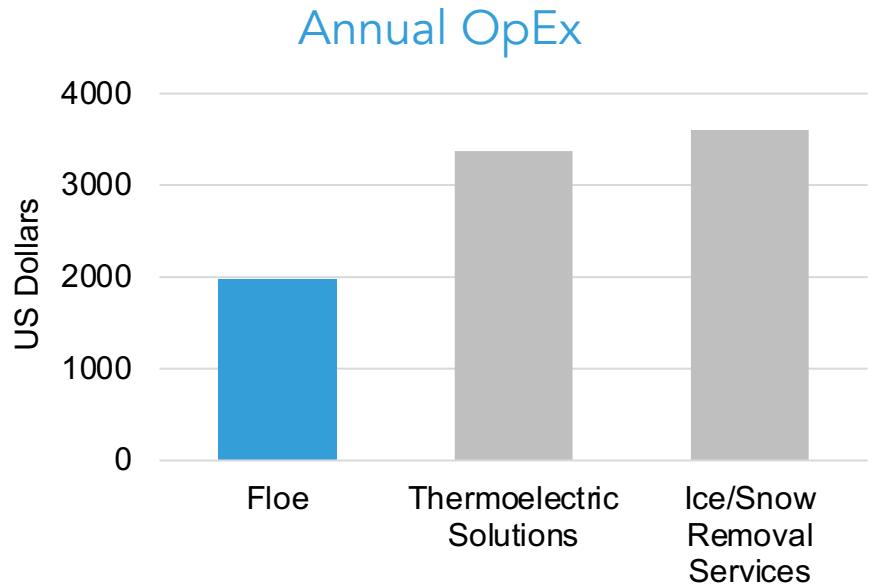


# Designed for Long Term Service

Floe is more cost-effective and is far easier to maintain than existing solutions

## >40%

Savings on annual operating costs



## Built to Last

The Floe system is also designed to last 10+ years, far longer than most electric melting systems

## Easily Maintained

Components can be quickly and easily replaced without any specialized tools or training

- ✓ Unlike electric melting systems, Floe does not require expensive specialists to fix or replace the system

## Robust

Floe uses UV-grade components, built for rugged environments

## Peace of Mind

Automatically activates 24/7 when needed

- ✓ If issues arise, Floe promptly sends notifications
- ✓ Unlike electric melting systems, there are no unwelcome surprises

# Use Cases

# Ice Dam Prevention

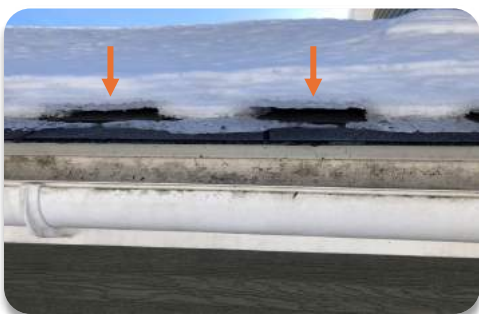
Floe Deicer™ carves channels in the ice dam to enable snowmelt to safely discharge



Floe's drip emitters can be easily applied to problem areas, including:

- ✓ Eaves
- ✓ Valleys
- ✓ Dormers
- ✓ Gutters & Downspouts

[Click here to watch a short demo](#)



Channels carved in an ice dam



Invisible on the facade



# Ice Dam Prevention

Floe melts and discharges snowmelt to prevent it from freezing into icicles

## Product Demo in Park City, UT (~276" of snow annually)



The Floe system is only installed on the left side of the roof

## Case Study in a CO ski town (~211" of snow annually)

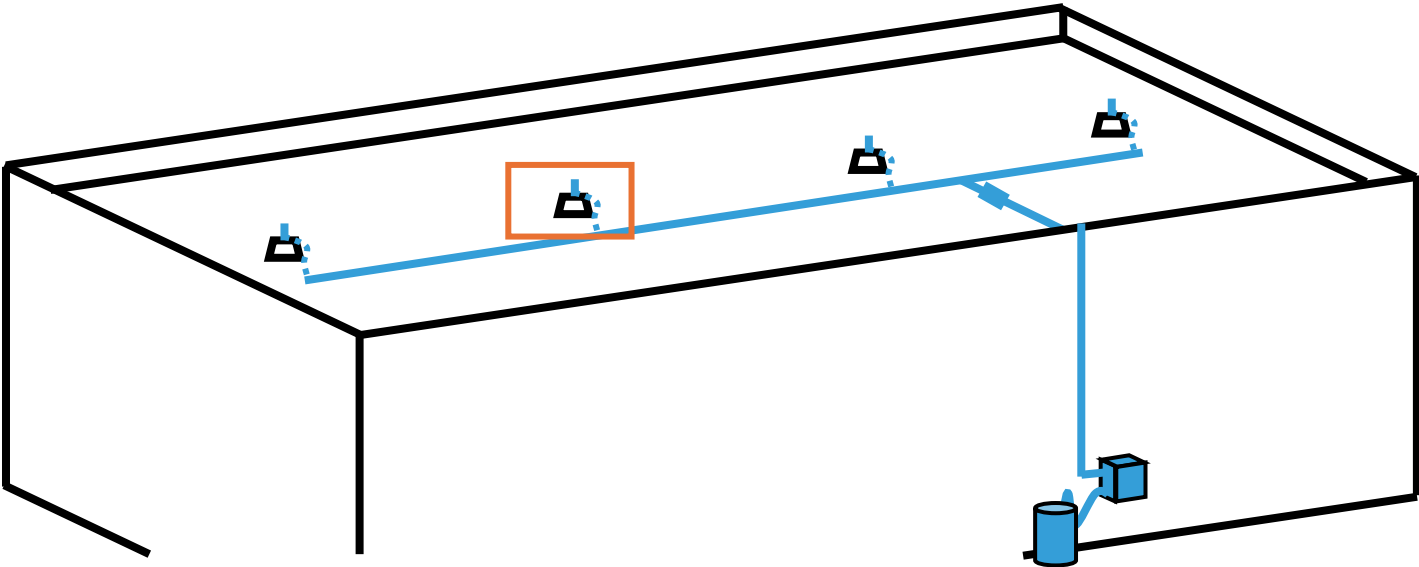
This site had massive icicles that posed a major hazard to visitors.

Floe's system clears the snowmelt and no longer allow it to refreeze and form dangerous icicles.

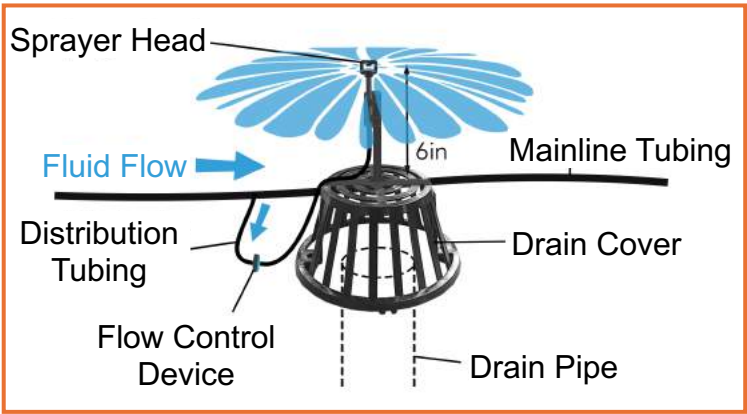


# Roof Drains – Ice & Snow Clearance

Sprayers clear ice and snow to keep the drains open



Example installation. Other roofs will vary.



- Mainline tubing
- ... Distribution tubing
- Pressure regulator
- ▲ Sprayer on roof drain



Before Activation



After Activation

# Gutters – Ice & Snow Clearance

Floe keeps gutters clear to ensure snowmelt can safely discharge

The gutter is  
frozen solid



Gutter Without Floe

Ice is broken up to enable  
snowmelt drainage



Gutter With Floe

Emitter tubing





# Modular Ice & Snow Mitigation Toolkit

Leverages sprayers to address issues (e.g. sealed roof hatches, frozen downspouts, dangerous icy walkways)



**A:** The solution for frozen downspouts

- ✓ Unlike thermoelectric systems, Floe prevents hazardous black ice on walkways



**B:** Easily installed sprayers clear drains, downspouts, and other problem areas



**C:** Can address snow and ice buildup on roof hatches to maintain roof access throughout the winter

# Snow Loading Mitigation

Addresses snow buildup around key problem areas (e.g. drifting zones, HVAC systems)



# Customer Testimonials

*"[Floe system] is a really great product, does the job itself...water was flowing no matter what the roof temperature was"*

–Maintenance Technician at Prologis

*"[We are] trying to can over the heating system at the moment...the [Floe] system is working great... we love it"*

–Facilities Manager at Mt Sunapee [Vail Resorts]

*"The Floe system has been working well. I feel like I don't need the heat tape anymore."*

–Associate at Snow Queen Lodge [Aspen, CO Hotel]



# Get the #1 solution for winter rooftop protection today!

Please reach out to inquire about any questions or further information.

We would be happy to develop a customized proposal tailored to your problem areas and needs!



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