IDEAL SURFACING

PREMIUM RUBBER SURFACE INSTALLATION

without salt!

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Overview:

- About Ideal Surfacing
- Market Situation
- Ideal Surfacing R&D Programs

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About us:

- Ideal Surfacing installs precision rubber safety surfacing for commercial and residential applications.

- We combine TVP rubber granules with a very strong MDI or Aliphatic urethane that fuses with whatever solid substrate it is applied over to form the strongest, safest, most enduring flexible surfacing available

- Our installation process avoids the use of the heavy equipment, excavation and forming necessary to replace old concrete. Installation normally takes just a day and the surface is ready to use within 48 hours.

- The soft, comfortable, porous surface aids in the prevention of water sitting dangerously around a pool deck or entrance way, its slip-resistance, impact absorbing features behave much like a rubber bath mat when wet, not only preventing slipping but, in most cases, reducing breaking of skin or bones should a fall happen.

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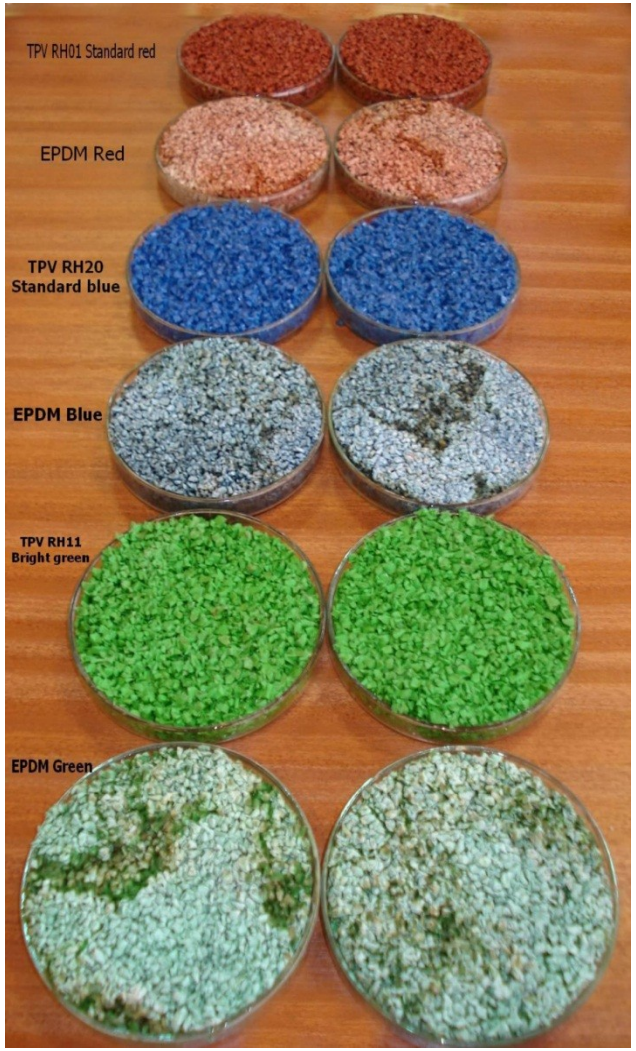
- Ideal Surfacing has chosen to utilize the next generation of material called thermoplastic vulcanizates (TPVs) produced by ISO certified manufacturers to ensure that your Ideal Surface is the very best quality available.
- TPV will not leach out harmful sulphurs or peroxides into the environment
- TPV is significantly more UV stable (no fading or whitening) compared to EPDM.
- This photo show the results of a laboratory test comparing EPDM granules sourced from a off-shore supplier versus TPV exposed to the equivalent of four months of continuous full sun



GREEN TOUCH PAVING
BY IDEAL SURFACING

Driveways with a touch of Green

Our Green Touch Paving utilizes recycled tires from the Ontario Tire Stewardship program. This is an excellent way to utilize recycled material and escape the maintenance requirements for asphalt driveways. Your system will produce a long-lasting surface that will maintain its appearance, retain its integrity and is strong enough to withstand snow-blowers.

- **Created from Ontario Recycled Tires**
- **Never turns grey or cracks**
- **Can be applied over your existing cracked or broken asphalt or concrete driveway**
- **Flexible surface promotes ice breakup and snow removal**
- **Strong enough to withstand snow blowers**
- **Transforms your drive into a cushioned sports surface (Customizable with game lines)**
- **Available in 100% fine grain recycled rubber or for a designer touch in a 80%/20% mixture with grey, brown, beige, green or red virgin, UV stable TPV rubber**
- **5 Year guarantee on workmanship**

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Play Grounds & Splash Pads

soft, safe surface so kids can be kids

We meet or exceed CSA standards on all play grounds!

Wild Water Kingdom, Brampton Ontario

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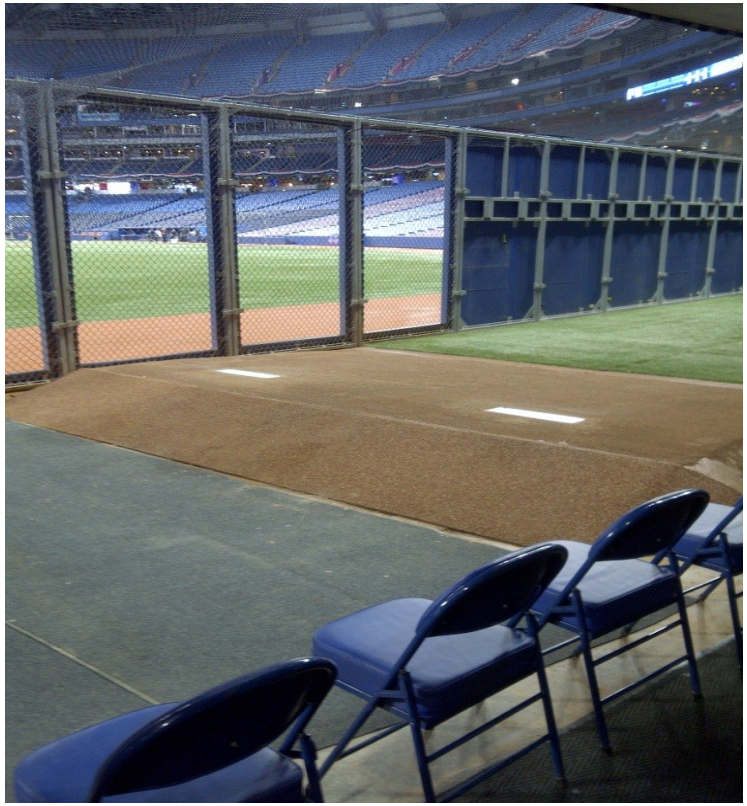
Commercial and Municipal Experience

Cities and townships in Southern Ontario have contracted us for splash pads, playgrounds , sport courts, fitness stations, patios , retirement facilities and community centres.

We have worked for the Toronto Blue Jays, Wild Water Kingdom, Lambton Golf Club, condo corporations and property management companies.



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The perfect finis

- With 20 colours of TPV granules the combinations are nearly endless
- Our craftsmen can create virtually any design from inlaid borders, elaborate patterns and logos

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Commercial Applications
Mitigating the risk of slip/fall accidents

- Anywhere the public or employees cross concrete surfaces that are wet, icy, cracked or broken poses the threat of slip fall accidents.

- The potential liabilities resulting from a slip/fall accident are significant, but they can be significantly reduced by quickly transforming a dangerous surface into a slip-resistant, impact absorbing Ideal surface.

- Limiting the potential for accidents is a goal all property owners can embrace, but enduring the costs and business interruptions involved in rebuilding concrete surfaces makes the traditional approach much less appealing.

- Ideal's precision installation avoids the use of the heavy equipment, excavation and forming necessary to replace old concrete. Installation normally takes just a day and the surface is ready to use within 48 hours.

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The well understood dilemma

The business/municipal perspective:

- Slip-Fall Accidents represent a significant and growing risk for property owners, employees and customers . (70% of playground accidents are falls)
- The costs of liability insurance is escalating and the consequences of litigation can be devastating
- The cost of clearing snow and salting to prevent icing is significant
- The impact of salting on infrastructure is significant and expensive to repair
- Documentation of preventive actions is critical to successful defense but time consuming and expensive
- Rapidly evolving regulations (detailed documentation of salting activities, amounts, location)

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The well understood dilemma

The public perspective:

- Assumes their safety is the responsibility of the property owner
- Injuries range from minor bruising, to fractures to life altering accidents
- Legal actions tend to favor the injured plaintive

The environmental perspective:

- 2000 years ago the Romans explained the environment impact of salt to Carthage when they destroyed their fields with salting
- Cost effective solution with an escalating environmental impact

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A new pathway to mitigating risk without salt

Ideal Surfacing R&D Objective:

- Create a retrofit solution to mitigate slip falls by combining the attributes of rubber safety surfacing with radiant heating

Design goals:

- Control ice buildup automatically
- Provide a non-slip and cushioned surface
- Readily retrofit to concrete surfacing
- Flexible configurations compatible with surfaces from ≤1000sqft to 1000+ sqft

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Radiant heating attributes:

- Effective on icing
- Automated
- Expensive installation (system submerged in concrete not a simple retrofit)
- Large energy demand for heating large masses of concrete
- Resistance to slipping the same as wet concrete

TPV Rubber Safety Surfacing Attributes:

- Provides a non-slip surface in wet and dry conditions
- Ice can form but is easily broken up
- Strong enough to withstand snow blowers
- Provides a cushioned surface to minimize impact and enhance comfort
- Retrofit to broken or concrete without heavy equipment ready to use in 24 hours
- Long lasting resilient surface, high UV resistance

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Overview of Ideal's 3 Research and Development Programs

Program 1, is focused on electrical radiant heating in partnership with

- **Develop an easily retrofit system for surfaces under 1000 sqft**

Nuheat

Program 2, is focused on thermal liquid (Glycol) in partnership with

- **Utilize a gas heat exchanger for a more energy efficient ice melting system for areas great than 1,000 sqft**

enerworks
Solar Heating and Cooling

Program 3, is focused on a solar assisted thermal liquid system

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Ideal Surfacing's Thermal Path™ Development Program with

Nuheat

About Nuheat:

- **Nuheat is the leading manufacturer of electric radiant floor heating systems and distributor of freeze protection products.**
- **Nuheat's full-line of Freeze Protection Products offer practical slab de-icing and snow melting.**
- **Manufactured by cable giant Fujikura, Nuheat's Freeze Protection Products are the choice of professionals**

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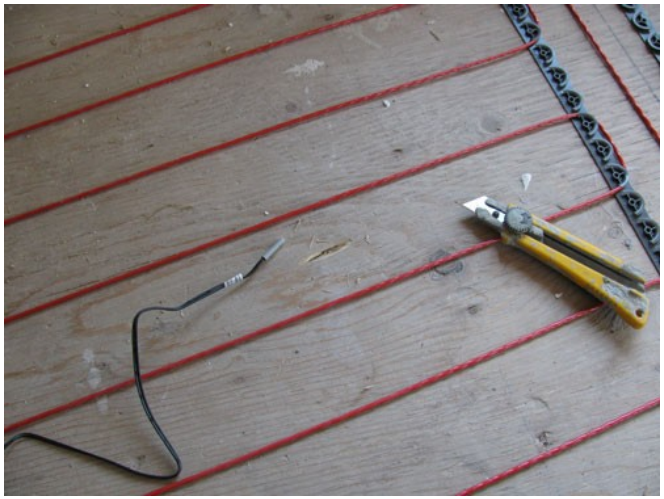
Ideal Surfacing's Thermal Path™ Development Program with Nuheat

System Components:

Ideal Surfacing TPV or TPV with recycled rubber surface with:



Mineral Insulated Heating Cables (MI)

- Constant wattage cables ideal for ice and snow melting

APS Control Panel

- Automatic snow/ice melting
- Interfaces with energy management computers
- Multiple sensor capability

Pavement mounted Sensor

- Detects moisture and low temperature

Aerial Mounted Sensor

- Senses snow condition and distributes power to heating cables

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Ideal Surfacing's Thermal Paving™ Development Program with Nuheat

System Attributes:

- **Flexibility allows the system to be configured to a wide variety of site requirements**
- **Simple surface installation allows for easy to retrofit to existing slabs**
- **Can be powered by 120 to 600 volt electrical systems**

Development Status:

- **Commercial and residential pilots underway**
- **Available in the spring of 2013**

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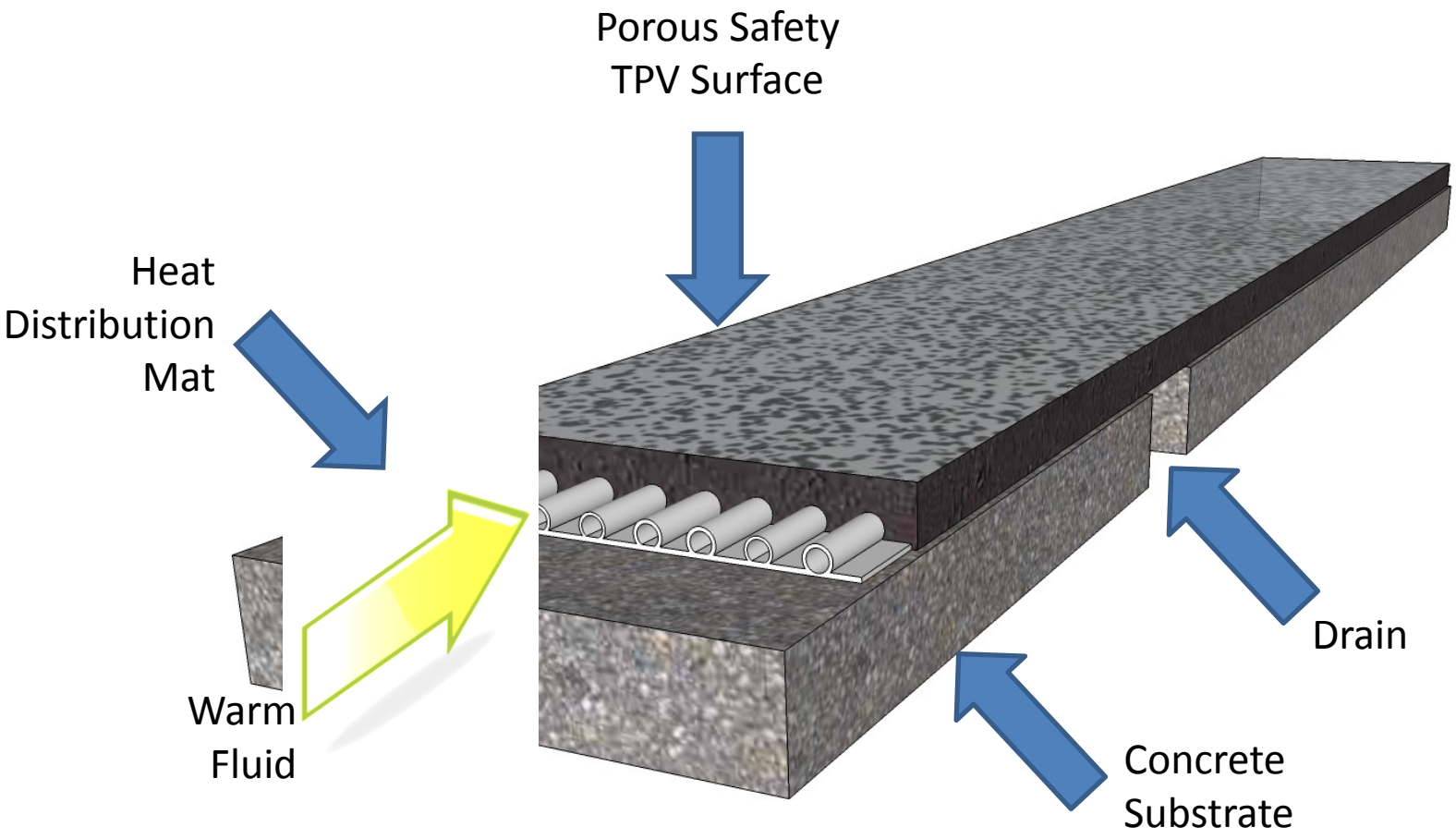
Ideal Surfacing's Development Program 2 with

enerworks
Solar Heating and Cooling

System components:

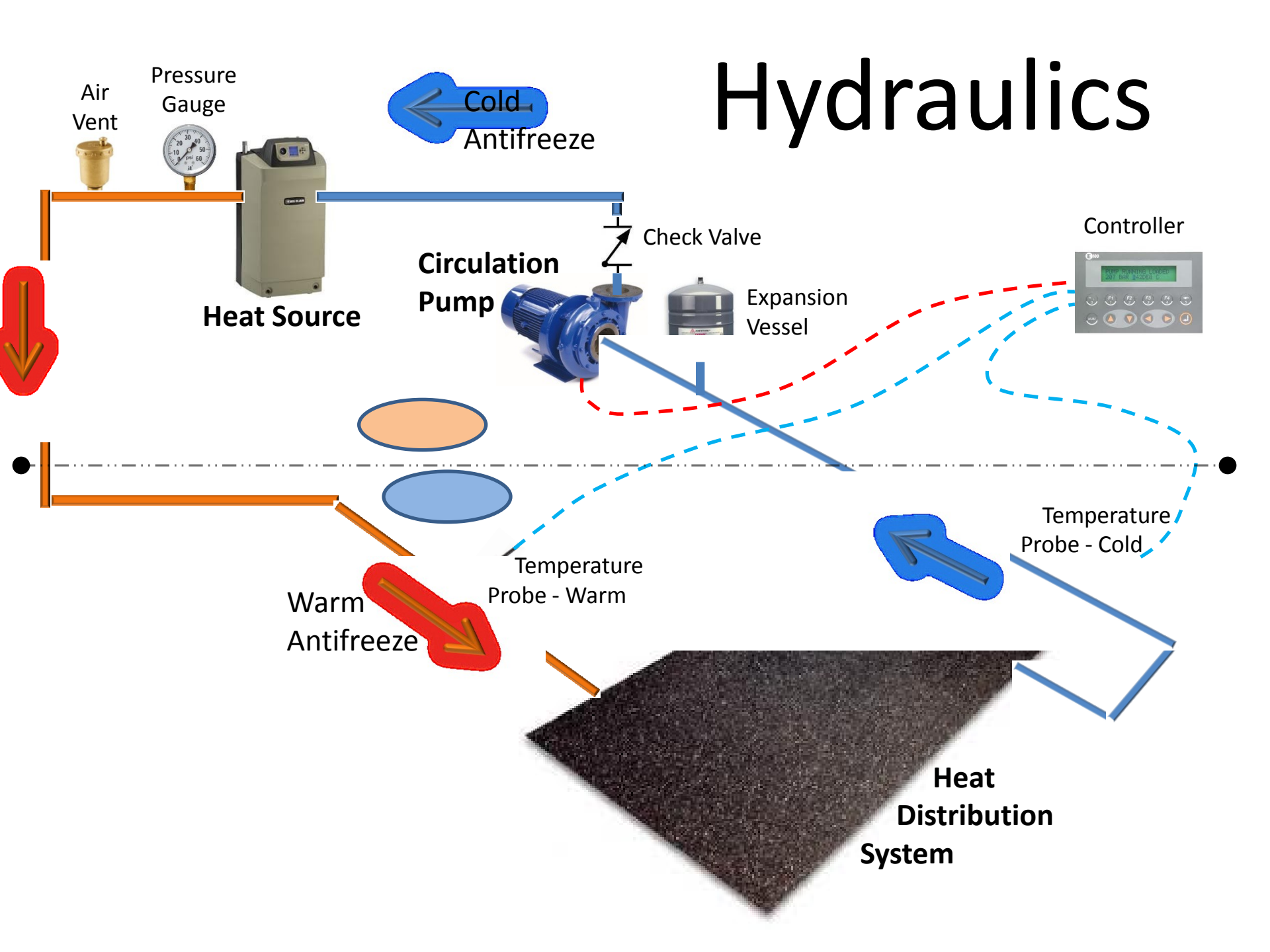
- **Ideal Surfacing TPV or TPV with recycled rubber surfac**
- **Rubber tube network**
- **Glycol**
- **Gas heat exchanger**
- **Thermostat and sensors**

Snow Melt Surface Detail

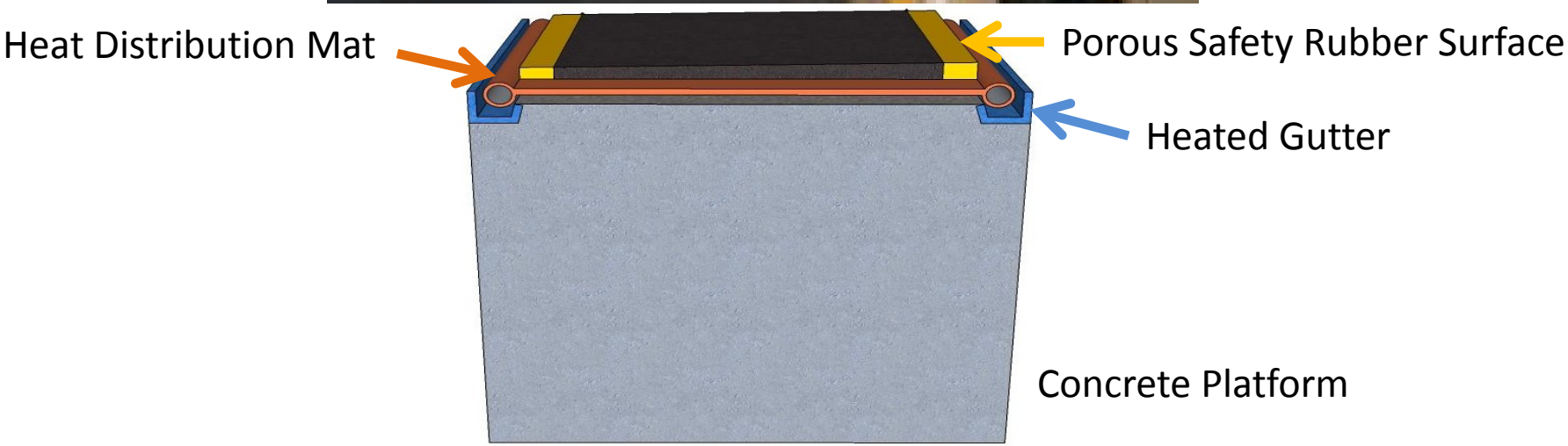


Snow melts & flows through porous surface to the drain

Hydraulics


Air Vent
Pressure Gauge
Cold Antifreeze
Heat Source
Circulation Pump
Check Valve
Expansion Vessel
Controller
Temperature Probe - Warm
Temperature Probe - Cold
Warm Antifreeze
Heat Distribution System

Train Platform Snow Melt



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Ideal Surfacing's Development Program 2

System Attributes:

- **Energy efficient compared to electrical systems**
- **More complex system requiring more installation steps**
- **Surface installation allows for easy to retrofit to existing slabs**
- **Depends on the availability of natural gas**

Development Status:

- **Engineering development underway**
- **Commercial pilots planned for 2013**

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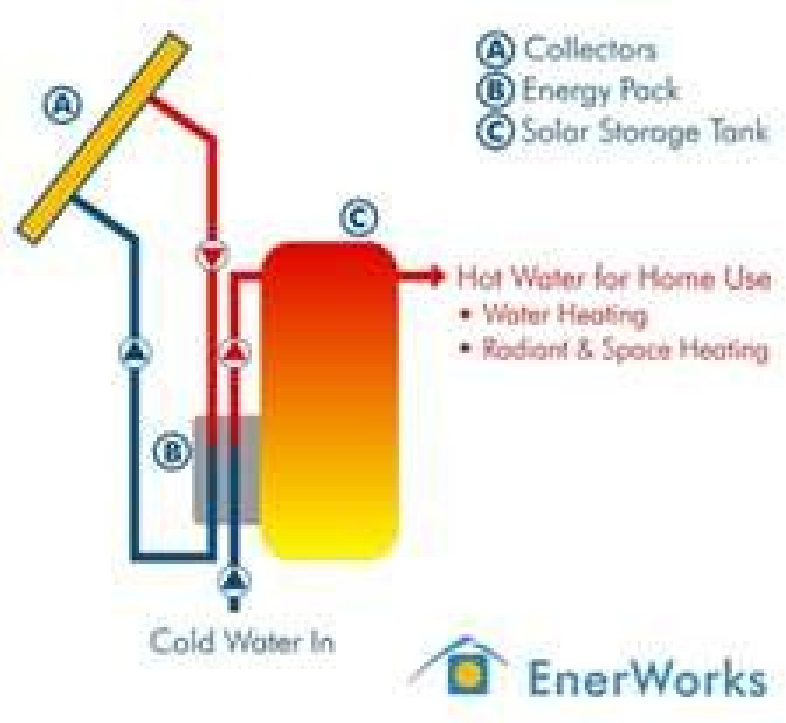

System components:

- **Ideal Surfacing TPV or TPV with recycled rubber surface with:**
- **Rubber tube network**
- **Glycol**
- **Solar arrays**
- **Pumps**
- **Heat exchanger**
- **Water heater/boiler**
- **Thermostat and sensors**

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Ideal Surfacing's Development Program 3

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System Attributes:

- **Most energy efficient system**
- **Most expensive system**
- **More complex system requiring installation of solar arrays**
- **Significantly more planning and site limitations**

Development Status:

- **Engineering development underway**
- **Government pilot planned for 2014**