Warmzone News

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Product Spotlight - PowerBlanket®

The innovative PowerBlanket® is an extremely durable, weatherproof covering that can be used for a variety of home and construction applications. From large outdoor projects to small indoor needs, electrically heated PowerBlankets can be easily linked together to meet your specific space requirements.

In addition to various home applications, the lightweight PowerBlanket marks a revolutionary advance in the concrete construction and precast industry. Capable of enhancing productivity and minimizing construction costs, the PowerBlanket is built to withstand the rigorous demands of outdoor

construction while providing energy-efficient heat and protection for materials, equipment and work environments. The outdoor electric blanket is an ideal concrete curing solution that can also be used on walls and columns.

Convenient, safe, and simple to use, the versatile PowerBlanket can be driven on, pulled over rebar, dragged through mud and water, buried, and then rolled up or folded until it is needed again.

Common Applications include: concrete curing, engine warming, bucket heating, wall curing, ground thawing, equipment warming, frozen pipe thawing, curb and gutter thawing.

"The blanket worked great in many applications; melting ice, thawing pipes, and clearing driveways. We will be contacting you soon regarding the purchase of more blankets."

Doug Johnson
Park City, UT

INSIDE THIS ISSUE:

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Traditional Versus PowerBlanket

Concrete Curing

Ground Thawing

Wall Curing

If you read almost any do-it-yourself guide, you'll see a sentence like, "If temperatures are below 40 degrees Fahrenheit, use insulated blankets or straw to keep your freshly-poured concrete from freezing."

That sounds good, but simply keeping the concrete from freezing isn't enough. In addition, no amount of blankets or straw will thaw frozen ground - and pouring concrete on frozen ground can have serious repercussions.

The chemical reaction of concrete formation creates some heat. This heat can be trapped, to some extent, with the use of insulating blankets or straw. But if it's cold enough outside, insulating blankets won't keep the temperature at an ideal level for maximum curing efficiency. No insulating blanket will keep concrete at a temperature between 65 - 85° F, which is the optimum range for proper concrete curing.

The colder the temperature that concrete is exposed to, the longer it will take to set and the longer it will take to reach its proper strength. For example, concrete maintained at 70° F will set in approximately 6 hours; concrete maintained at 40° F will take 14 hours to set. Concrete maintained at 70° F will reach a compressive strength rating of 2,700 psi in three days; concrete maintained at 40° F will only reach a strength rating of 1,200 psi in three days. That strength difference makes a huge difference in whether your construction project can proceed or not. If the concrete takes too long to set, cure, and reach a proper compressive strength rating, your project can be significantly delayed.

The difference in conventional insulating blankets and PowerBlanket® concrete curing blankets is significant.

PowerBlanket® concrete curing blankets can be used for ground thawing before placing concrete. Once the concrete is placed, PowerBlanket® concrete curing blankets maintain the concrete at the temperature you need. In effect, PowerBlanket® concrete curing blankets allow you to cure the concrete as if it's a spring day, even when you're working in an extremely cold climate zone. By using PowerBlanket® concrete curing blankets for ground thawing, and using PowerBlanket® concrete curing blankets to maintain an ideal concrete temperature, you virtually eliminate costly weather delays and ensure that the project proceeds on schedule and the concrete will be long-lasting and durable.

Ask Dan

Q. How many PowerBlankets can I plug into one 20 Amp outlet?

The number of PowerBlankets that can be plugged into a single 20 amp outlet will depend upon the specific blankets selected. Each blanket has requires a different number of amps to operate. It is important to not plug in more blankets than your breaker can handle. For example you can plug up to:

- Twenty - 2 ft x 2 ft ExtraHot Warmer
- Three -3 ft x 3ft SuperDuty
- Two -10ft x 10ft SuperDuty
- One - 23 ft x 11 ft SuperDuty
- One - 12 ft x 6ft ExtraHot SuperDuty

As long as you keep the total number of amps below the rating of the outlet you should be fine.

Dan has over 32 years of experience as an electrician and is an expert in radiant heating. He received his Master's Electrical Contracting License from Philadelphia and has an Electrical Technologies Teaching Certificate from Rutgers University.

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888.488.WARM

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Warmzone News is for informational purposes only. Equipment should be installed by a qualified electrician in accordance with manufacturer's instructions and national and local codes.

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