



# ICE MELT PRODUCT INFORMATION GUIDE

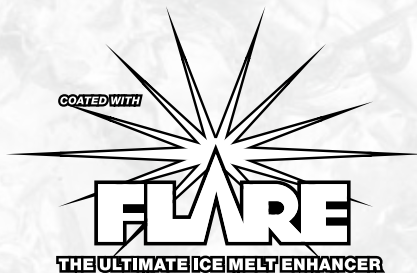


**MENARDS®**

**ICE MELT  
PRODUCT  
OFFERING**



<b>Calcium Chloride</b>		<b>X</b>	<b>X</b>	
<b>Magnesium Chloride</b>	<b>X</b>	<b>X</b>		<b>X</b>
<b>Sodium Chloride</b>	<b>X</b>	<b>X</b>		
<b>Contains FLARE Liquid Enhancer</b>		<b>X</b>		
<b>Melts Down to</b>	<b>-5°F</b>	<b>-15°F</b>	<b>-25°F</b>	<b>-15°F</b>
<b>Melting Speed</b>	<b>FAST</b>	<b>FASTER</b>	<b>FASTEST</b>	<b>FASTER</b>
<b>Dyed for App Control</b>	<b>X(BLUE)</b>	<b>X(BLUE)</b>		
<b>Use on Concrete</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Use on Treated Wood</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Use on Asphalt</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>No Tracking</b>	<b>GOOD</b>	<b>BETTER</b>	<b>BEST</b>	<b>BETTER</b>



FLARE is a unique, proprietary liquid additive that is added to END ICE to enhance the performance of the blend. Fast, consistent melting action is key to creating a safe, clean, and walkable surface during the tough winter months. Creating an ice melting brine is key to effective deicing, and FLARE provides the necessary spark to ignite the melting action necessary even in the worst winter weather. FLARE not only enhances the melting speed of the product, but also encapsulates each ice melting granule, leading to a cleaner product that is easy to spread. When the temperature dips and the ice is piling up, look to END ICE with FLARE for all your de-icing needs.

# WHAT IS BLENDED ICE MELT?

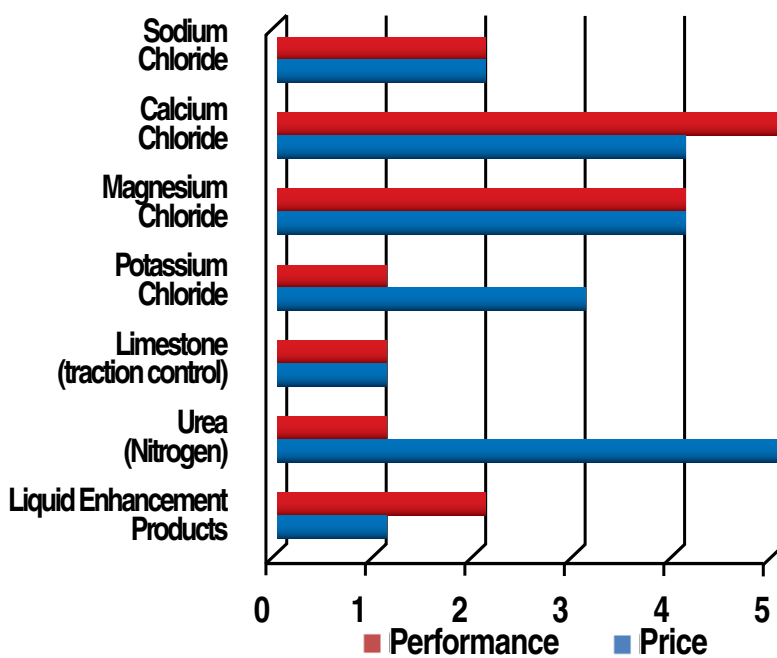
A blended ice melting product is a composition of numerous de-icing granules which work in conjunction with one another to provide optimum melting performance. Blended product typically contains two or more of the following chlorides or granular products (along with liquid enhancement products and liquid dyes):

- **Sodium Chloride** (Rock Salt)
- **Magnesium Chloride**
- **Urea** (Nitrogen)
- **Liquid dyes** (for increased visibility, no melting capabilities)
- **Calcium Chloride**
- **Potassium Chloride**
- **Limestone** (for traction)
- **Liquid enhancement products** (typically sprayed on)

The percentage of each ingredient utilized in any given blend will dictate the quality, consistency, and appearance of the de-icing product. Each ingredient listed above brings with it a set of positive and negative characteristics in regards to performance, price, and de-icing effects.

In formulating a blend, the ingredients most often utilized are three chlorides: sodium, calcium and magnesium. The basis for the majority of blends on the market is sodium chloride as it carries a low cost and is readily available. It also performs down to relatively cold temperatures and can be activated by friction from tires and even heavy foot traffic. Sodium and potassium chloride both work by absorbing heat, they do not generate heat by themselves. The low temperature melting and speedy activation of a blend is normally attributed to the calcium and magnesium chloride in the blend. Both chlorides react faster and to lower temperatures than sodium or potassium as they benefit from hygroscopic characteristics. In other words, calcium and magnesium draw in moisture from the surrounding air to create heat. The higher the percentage of calcium and magnesium in a blend, the faster the product will work. It also means that the blend will work to lower temperatures. With the increased performance comes a higher price tag, calcium and magnesium chloride are expensive raw materials, so the higher the percentage of calcium and magnesium, the higher the cost of the product.

## PRICE TO PERFORMANCE COMPARISON



# RAPID MELT



- Melts to -5°F
- Melts faster, lasts longer than standard rock salt

- Starts to work on contact
- Blue color for ease of application

Rapid Melt® is a medium-sized granular de-icing particle containing sodium chloride crystals with a magnesium chloride coating. Rapid Melt® ice melter is a free-flowing and performance driven alternative to straight rock salt or other low value ice melting products. Rapid Melt® maximizes your budget dollars by offering extended melting periods, which means fewer applications. It starts working directly on contact and works faster & longer than standard rock salt. Rapid Melt® is dyed blue, providing visual evidence of the spread rate and spread pattern, both of which are key to reducing over-application. Speed is a must when the weather turns, so trust Rapid Melt® to work fast and long into the winter storm!

**Storage:** Seal container tightly after each use and store upright in a cool, dry area inaccessible to children and domestic animals. Note: During periods of high humidity or if the product comes in contact with moisture, water may pool around and inside the package. This may cause the particles to adhere to one another and the product may become difficult to spread.

**Directions for use:** Apply at a rate of 2-4 oz. (1/4 – 1/2 cup) per square yard by sprinkling evenly or by using a spreader. Remove any resulting slush and water prior to refreezing. Reapply as needed. Shortly after activation Rapid Melt breaks down to a colorless, odorless liquid and leaves no slippery film or white residue. Always read and follow label instructions.

SKU#	Description
265-1514	50Lb Individual Bag (49 bags per pallet)
265-1540	Truckload Quantity of 50Lb Bag (833 individual bags / 17 pallets)
265-1500	2000Lb Individual Tote (1 tote per pallet)
265-1543	Truckload Quantity of 2000Lb Tote (21 totes / 21 pallets)

# END ICE



- Melts to -15°F
- Quickly rid high foot traffic areas of hazardous ice and snow

- Professional results every time
- Blue color for ease of application

End Ice® is a medium-sized granular de-icing blend containing sodium chloride crystals, calcium chloride flakes, and magnesium chloride flakes. When priority #1 is quickly ridding high foot traffic areas of hazardous snow and ice, turn to End Ice®. This blend is formulated to capitalize on two high-speed additives, magnesium chloride and calcium chloride. These two ingredients jumpstart the melting process even when temperatures drop to -15°F. After End Ice® capitalizes on the fast-acting materials within the blend, it turns to sustaining, long lasting particles for effective melting even hours after application. End Ice® works for extended periods of time, reducing the need to reapply product. End Ice® is also dyed blue, making it easy to see where the product has been placed, and more importantly, making it easier to see how much product has been spread. End Ice® delivers de-icing speed, performance, safety, and reliability!

**Storage:** Seal container tightly after each use and store upright in a cool, dry area inaccessible to children and domestic animals. Note: During periods of high humidity or if the product comes in contact with moisture, water may pool around and inside the package. This may cause the particles to adhere to one another and the product may become difficult to spread.

**Directions for use:** Apply at a rate of 2-4 oz. (1/4 – 1/2 cup) per square yard by sprinkling evenly or by using a spreader. Remove any resulting slush and water prior to refreezing. Reapply as needed. Shortly after activation End Ice® breaks down to a colorless, odorless liquid and leaves no slippery film or white residue. Always read and follow label instructions.

Sku#	Description
265-1515	12Lb Individual Shaker Jug (120 jugs per pallet)
265-1525	20Lb Individual Bag (120 bags per pallet)
265-1517	40Lb Individual Pail (60 pails per pallet)
265-1509	50Lb Individual Bag (49 bags per pallet)
265-1541	Truckload Quantity of 50Lb Bag (833 individual bags / 17 pallets)
265-1505	2000Lb Individual Tote (1 tote per pallet)
265-1544	Truckload Quantity of 2000Lb Tote (21 totes / 21 pallets)

# VANQUISH



- Melts to -25°F
- Maximum strength melting power
- Works immediately upon application
- Consistent pellet sizing for even spreading

Vanquish is a round, medium- sized de-icing pellet that is white in color. Vanquish works quickly upon contact even in the worst ice and snow conditions and in temperatures as low as -25°F. Vanquish calcium chloride is unique to other ice melting products because it is 90% pure calcium chloride, which is the most effective ice melter on the market. Vanquish melts ice two to five times faster than other ice melt materials and performs in a wide range of winter temperatures, even extreme cold. With Vanquish, the creation of ice melting heat is instantaneous, making it more effective at colder temperatures than other materials. Vanquish turns on the heat for exceptional performance across a wide range of temperatures!

**Storage:** Seal container tightly after each use and store upright in a cool, dry area inaccessible to children and domestic animals. Note: During periods of high humidity or if the product comes in contact with moisture, water may pool around and inside the package. This may cause the particles to adhere to one another and the product may become difficult to spread.

**Directions for use:** Apply at a rate of 2-4 oz. (1/4 – 1/2 cup) per square yard by sprinkling evenly or by using a spreader. Remove any resulting slush and water prior to refreezing. Reapply as needed. Shortly after activation, Vanquish breaks down to a colorless, odorless liquid and leaves no slippery film or white residue. Always read and follow label instructions.

SKU#	Description
265-1622	50Lb Individual Bag (49 bags per pallet)
265-1542	Truckload Quantity of 50Lb Bag (833 individual bags / 17 pallets)

# K-9



- Melts to -15°F
- Safer for people, pets, and vegetation



- Fast acting and long lasting melting performance
- All natural ingredient

K-9® is a safer ice melting alternative when concerned with the welfare of your furry friends. De-icing products are widely considered a potential nuisance to a pet's health. Although exposure or consumption of any chemical in large amounts can be hazardous, typically, de-icing products are not considered life threatening. Ingestion of product and paw irritation are the two main threats a de-icing product can have on the well being of a pet. Both threats can be easily avoided if proper precautions are taken before, during, and after the application of an ice melting product. K-9® Pet Friendly Ice Melt has a low toxicity, which makes it much safer to use where pets may be present. With K-9® Pet Friendly ice melt there's less worry about pets licking their paws when they return indoors. K-9 Pet Friendly Ice Melt not only provides a safer deicing alternative, but also performs effectively down to -15 F!

**Storage:** Seal container tightly after each use and store upright in a cool, dry area inaccessible to children and domestic animals. Note: During periods of high humidity or if the product comes in contact with moisture, water may pool around and inside the package. This may cause the particles to adhere to one another and the product may become difficult to spread.

**Directions for use:** Apply at a rate of 2-4 oz. (1/4 – 1/2 cup) per square yard by sprinkling evenly or by using a spreader. Remove any resulting slush and water prior to refreezing. Reapply as needed. Shortly after activation, K-9® Pet Friendly Ice Melt breaks down to a colorless, odorless liquid and leaves no slippery film or white residue. Always read and follow label instructions.

SKU#	Description
265-1520	8Lb Individual Shaker Jug (120 jugs per pallet)
265-1521	20Lb Individual Bag (100 bags per pallet)

# THE THREE MAIN MELTING GRANULES

## CALCIUM CHLORIDE (CaCl)

- Melts to -25° F
- The fastest acting ice melt available
- High cost raw material, similar to magnesium chloride
- Comes in a white flake shape or a round pellet
- Hygroscopic - calcium chloride draws in moisture from the air to accelerate the melting process
- In regards to performance, calcium chloride adds the most benefit to the speed and melt to capabilities of a blend

## MAGNESIUM CHLORIDE (MgCl)

- Melts to -15° F
- High cost raw material, similar to calcium chloride
- Comes in a thick flake shape or a round pellet
- A secondary plant nutrient and is used as a fertilizer. Is considered an environmentally friendly option
- The least corrosive of all the chlorides
- Hygroscopic - magnesium chloride draws in moisture from the air to accelerate the melting process

## SODIUM CHLORIDE (NaCl)

- Melts to 12° F
- The least expensive and most abundant chloride
- Comes in a variety of shapes, but for the purpose of de-icing, a medium crystal shape is ideal
- The most commonly used de-icing granule both in blended products and as a straight product
- Commonly referred to as "rock salt"
- The base product for the majority of blended products on the market

# SIZE AND SHAPE OF ICE MELTING GRANULES

The size and shape of ice melting granules is important to the overall performance of the ice melting blend. Ice melting granules come in three basic shapes: crystals, pellets, and flakes. To assure even flow through a spreader, prompt activation, and an ample residual effect, strict quality control measures must be in place to monitor particle sizing and consistency. The following descriptions will detail the advantages and disadvantages of the three basic granular shapes and how each is utilized to assure the safest and most effective thaw possible.

**CRYSTALS:** Crystals are screened to separate them into three categories or sizes: fines, mediums, and overs. Fines, the smallest particles, and overs, the largest particles, are not effective ice melting crystals. For the purpose of melting ice, the medium sized crystal provides the best results. It is the most effective, cleanest, and easiest product to spread and it has the mass to bore through ice and snow and activate quickly. A medium sized sodium chloride crystal is used in End Ice and Rapid Melt blends.

**FLAKES:** While a flake covers a great deal of surface area, it is normally too thin to provide a great deal of melting power. However, when the flake is thick it becomes a very effective melter as it benefits from both the increased surface area and the mass to bore through ice and snow. A thick flake magnesium and calcium chloride is utilized for blended products.

**PELLETS:** Pellets are effective melting granules when they are sized correctly. Small pellets have limited melting power. The lack of size does not allow the product to effectively bore down through ice and snow. These small particles are also considered dangerous because they sit on the surface of the ice and snow and can cause slippage in very cold climates. Large pellets have the ability to bore through ice and snow quickly, which increases the melting performance and reduces the amount of slippage. A large size magnesium chloride pellet is considered one of the top products on the market in terms of performance.



# EFFECTS OF ICE MELTERS

## CONCRETE DAMAGE

Any and all effective ice melting products have the potential to create a circumstance where concrete damage may occur. De-icing products will not chemically damage high quality concrete. However, damage can occur when a de-icing product works properly and causes water to seep into naturally occurring cracks and air pockets in concrete and other hard surfaces. When the de-icing material dissipates, the water eventually re-freezes. When the water re-freezes, it expands. This expansion of water causes a hydraulic effect on the concrete walls and causes the disruption and weakening of the overall concrete.

To avoid damaging the concrete, applicators should follow the application directions on the back of the bag or container and remove the slush or pooled water that is produced as soon as possible. If the de-icing product is over applied, there will be a greater melting period, allowing for more freeze/thaw cycles. Also, establishing strong, properly air entrained, and properly finished concrete will also increase resistance to the re-freezing of water and reduce the potential for concrete damage.

## VEGETATION

The best way to control vegetation damage from ice melting products is to minimize usage and curb runoff as much as possible. Therefore, the best way to reduce the chance of harming vegetation is to apply product at the recommended rates and to control the spread of the product. For this reason, the applicator has the biggest hand in controlling vegetation kill. Each chloride and granular product used in a blended ice melting product has the potential to harm vegetation when over-applied. The key is to use an effective product that allows you to spread less material. Commonly used ice melters like urea and potassium chloride are very gentle to vegetation, but they do not de-ice effectively. Sodium, magnesium, and calcium chloride are much more active de-icers, therefore; applicators can use less of these products and yield the same results as urea and potassium. This will result in faster and more efficient results at a lower cost.

## CORROSION

It is a natural characteristic of chlorides to corrode metal to a certain degree; however, when used properly the effect can be contained. Magnesium is the least corrosive of all the chlorides. This reduces the probability of chloride brine coming in contact with metal and causing corrosion. The higher the magnesium content in a blend, the less corrosive the product will be. Sodium, calcium, and potassium chloride are all rather corrosive to metal, so to minimize the risk of corrosion, products with high percentages of these chlorides should not be spread near metal objects or metal framework.

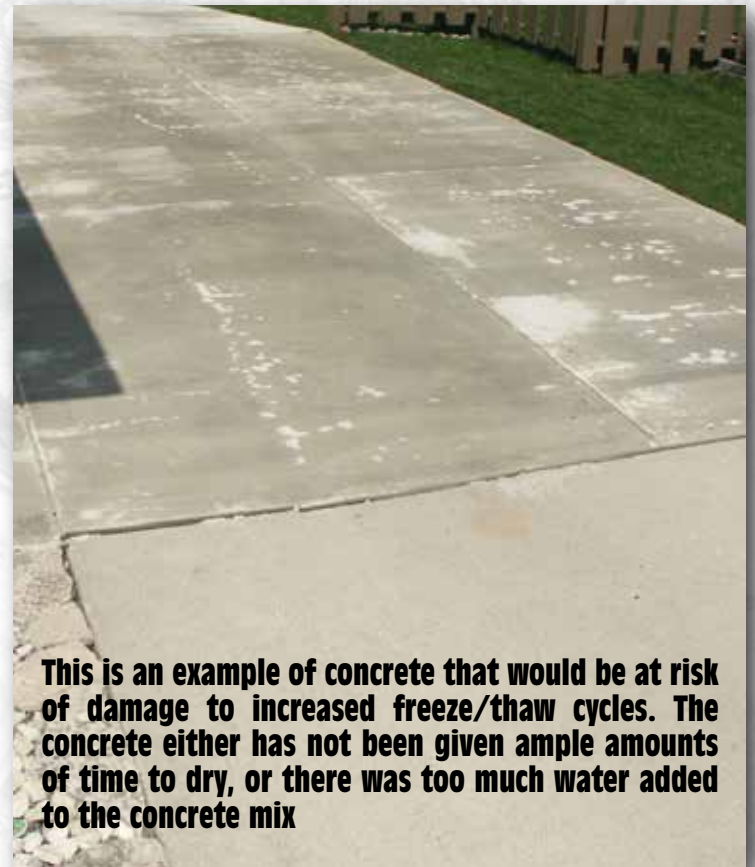
## TRACKING

A main area of concern for businesses, institutions, government facilities, and homeowners comes during and after the storm in the form of ice melt residue and tracking. All ice melters have the potential to be tracked indoors. Although it is impossible to avoid tracking altogether, applicators can take steps to dramatically reduce the amount tracked indoors. The degree of tracking is based on three things:

**1) MELTING SPEED:** Ice Melting products geared for speed track less because they penetrate the ice quickly and dissolve into a liquid brine faster. Once in a liquid form, the slush and brine can be tracked into buildings, where they will dry out and leave a powdery, chalky residue. This residue is easily swept or mopped up and is not a threat to cause long term damage.

**2) ICE MELT COMPOSITION:** Ice Melting products with high percentages of calcium and magnesium chloride tend to track less than other formulations. This is true because the faster a product breaks down and activates, the less likely it is to be tracked indoors. Calcium and magnesium chloride tend to break down and leave a white, chalky residue, but the advantages of the speed enhancement they provide far outweigh the minimal residue created.

**3) OVER-APPLICATION:** When an ice melting product is over-applied, the risk of tracking increases as well. By applying too much product, the applicator increases the chance of having inactive material sitting on the surface. Inactive material increases the chance for granules to be tracked in on the soles of pedestrians' shoes.



**This is an example of concrete that would be at risk of damage to increased freeze/thaw cycles. The concrete either has not been given ample amounts of time to dry, or there was too much water added to the concrete mix**

# PRODUCT SPECS



Rapid Melt® is a medium-sized granular de-icer containing sodium chloride with a magnesium chloride based coating encapsulating each particle.. Rapid Melt® ice melter is a free-flowing and performance driven ice melting product. Rapid Melt® maximizes your budget dollars by offering extended melting periods, which means fewer applications. Rapid Melt® is dyed blue, providing visual evidence of the spread rate and spread pattern, both of which are key to reducing over-application. Trust Rapid Melt® to work fast and long into the winter storm!

SKU #	Description	Pallet shipping weight	Truckload shipping weight
265-1514	50Lb Individual Bag (49 bags per pallet)	2550 Lbs	
265-1540	Truckload Quantity of 50Lb bag (833 individual bags / 17 pallets)		43350 Lbs
265-1500	2000Lb Individual Tote (1 tote per pallet)	2100 Lbs	
265-1543	Truckload Quantity of 2000Lb Tote (21 totes / 21 pallets)		44100 Lbs



End Ice® is a medium-sized granular de-icer consisting of sodium chloride, calcium chloride, and magnesium chloride. When priority #1 is quickly ridding high foot traffic areas of hazardous snow and ice, turn to End Ice®. This blend is formulated to capitalize on two high-speed additives, calcium chloride and magnesium chloride. These two ingredients jumpstart the melting process even when temperatures drop to -15°F. After End Ice® capitalizes on the fast-acting materials within the blend, it turns to sustaining, long lasting particles for effective melting even hours after application. End Ice® works for extended periods of time, reducing the need to reapply product. End Ice® is also dyed blue, making it easy to see where the product has been placed, and more importantly, making it easier to see how much product has been spread. End Ice® delivers de-icing speed, performance, safety, and reliability!

SKU #	Description	Pallet shipping weight	Truckload shipping weight
265-1515	12Lb Individual Shaker Jug (120 jugs per pallet)	1680 Lbs	
265-1525	20Lb Individual Bag (120 bags per pallet)	2500 Lbs	
265-1517	40Lb Individual Pail (60 pails per pallet)	2580 Lbs	
265-1509	50Lb Individual Bag (49 bags per pallet)	2550 Lbs	
265-1541	Truckload Quantity of 50Lb Bag (833 individual bags / 17 pallets)		43350 Lbs
265-1505	2000Lb Individual Tote (1 tote per pallet)	2100 Lbs	
265-1544	Truckload Quantity of 2000Lb Tote (21 totes / 21 pallets)		44100 Lbs



Vanquish is a round, medium-sized de-icing pellet that is white in color. Vanquish maximum-strength calcium chloride pellets work quickly upon contact even in the worst ice and snow conditions and in temperatures as low as -25°F. Vanquish calcium chloride is easily distinguished from other ice melters because it contains more than 90 percent pure calcium chloride, the most effective material for melting ice and snow. Vanquish melts ice two to five times faster than other ice melt materials and performs in a wider range of winter temperatures, even extreme cold. With Vanquish, the creation of ice melting heat is instantaneous, making it more effective at colder temperatures than other materials. Vanquish turns on the heat for exceptional performance across a wide range of temperatures!

SKU #	Description	Pallet shipping weight	Truckload shipping weight
265-1622	50Lb Individual Bag (49 bags per pallet)	2550 Lbs	
265-1542	Truckload Quantity of 50Lb Bag (833 individual bags / 17 pallets)		43350 Lbs



K-9® Pet Friendly Ice Melt is a safer ice melting alternative when concerned with the welfare of your furry friends. Ingestion of product and paw irritation are the two main threats a de-icing product can have on the well being of a pet. Both threats can be easily avoided if proper precautions are taken before, during, and after the application of an ice melting product. K-9® Pet Friendly Ice Melt has a low toxicity, which makes it much safer to use where pets may be present. K-9® Pet Friendly ice melt not only provides a safer alternative de-icing material but also performs effectively down to -15°F!

SKU #	Description	Pallet shipping weight	Truckload shipping weight
265-1520	8Lb Individual Shaker Jug (120 jugs per pallet)	1200 Lbs	
265-1521	20Lb Individual Bag (100 bags per pallet)	2100 Lbs	

# ORDERING DETAILS

**Menards is excited to offer guests the option to order ice melt and have it delivered directly to the job site or delivery location of your choice\*. Our goal with this service is to better serve your de-icing needs and eliminate the need to haul pallets of ice melt from the store. Here are some additional guidelines when utilizing this service. Please contact your local Menards store for additional information.**

- Order can be completed in store or on Menards.com
- Order must be for full truckload
- Delivery carrier does not offer driver unload assistance. Delivery location must have equipment to unload shipment and loading dock. Delivery available to commercial property addresses only. Residential property address deliveries not available. \*Delivery location must be within 75 miles of a Menards store.
- Average lead time is 7 business days from receipt of order. During periods of high demand, such as winter storms, lead times may be extended.



# MENARDS

*Dedicated to Service & Quality*<sup>SM</sup>



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