

Warm Tiles™ DMC Series

Floor Warming Cable for use with Uncoupling Membrane. For Residential and Commercial Applications.

Product Overview

- Warm Tiles Electric Floor Warming Cable for Uncoupling Membrane (DMC) is the easy-to-install, reliable solution for your floor warming project.
- The cable was specially designed to be used with all available uncoupling membranes, so installation could not be simpler.

Applications

- DMC cables are designed to gently warm flooring materials such as:
 - Marble
 - Ceramic
 - Glass and porcelain tile
 - Slate
 - Granite
 - Poured or dimensional stone
 - Laminate and certain engineered hardwood products

Features

- Available in 120 and 240 Vac.
- Designed to work with 1.2" (30.5 mm) hub spacing membranes or DMCS strapping strips.
- Heating area range from 7 ft² – 250 ft² (0.7 m² – 23 m²).
- Cable can be laid directly from the spool into the membrane in the optimal spacing configuration for your installation.
- Once the cable is installed, tile installation is easy: self-leveling or scratch coat may not be required.
- Approved for a variety of applications and floor finishes for the ultimate in versatility and compatibility.
- Cables can also be installed in steps, including risers, leading to a bath/shower area in most jurisdictions. *Check with your local electrical inspector before installing in steps.*
- Fifteen year limited warranty.

Accessories

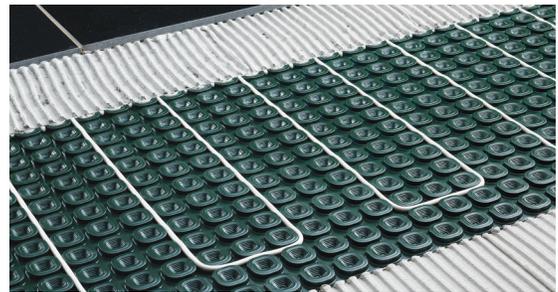
- Our Warm Tiles DMCS Cable Strapping Strips are designed to work exclusively with DMC floor-warming cables. See *Warm Tiles DMCS Cable Strapping Strips*.
- It is recommended that a floor temperature sensing thermostat be used to control the cable system. See *Warm Tiles Thermostats*.
- Relays can be used in conjunction with a thermostat to control large heated areas where the power requirement exceeds 15 Amps. We offer relay kits for use with thermostats. See *Warm Tiles Floor Warming Accessories*.

Certifications

- CSA Certified for use in both the U.S. and Canada.

Included in Box

- DMC cable, Tri-Language Instructions.



Notes

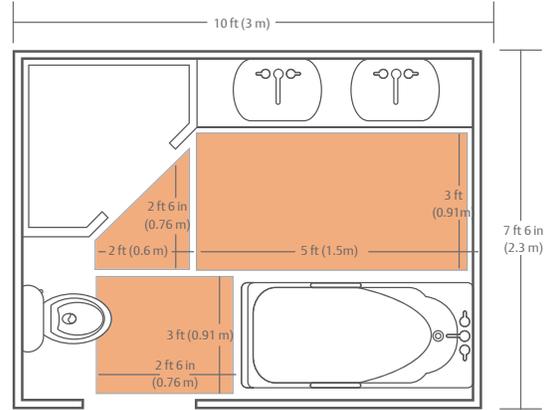
- Per NEC and CEC requirements **ALWAYS** use a ground fault protection device (GFCI) to reduce the danger of fire from a damaged or improperly installed heating cable. Electrical fault currents caused by damaged or improperly installed cable **MAY NOT BE LARGE ENOUGH** to trip a conventional circuit breaker.
- Heating cables must be installed in compliance with all national, state/provincial and local codes. Check with your local electrical inspector for specific details.
- The Warm Tiles heating cables must be completely embedded in a cement-based layer of mortar prior to installation of the flooring material. DMC cable with uncoupling membrane will add approximately 0.387 in (9.83 mm) to the floor height.
- Cables are not designed as a primary source of space heating for any room in which it is installed.
- Heating cable must not touch, cross or overlap itself at any point.
- **DO NOT** install heating cable under any type of nailed-down or stapled flooring. Floor nails and staples can damage the cable resulting in exposed live electrical parts and/or result in the cable overheating.
- Warm Tiles cables may not be installed under natural wood floors because the heat from the cables will cause these floors to warp, crack and/or discolor. Before beginning installation, check with the flooring manufacturer to verify that their materials are suitable for electric radiant underfloor heating.
- **DO NOT** bend the heating cable at right angles – this could damage the electrical insulation; minimum bending radius is 3/4 in (19 mm).
- **DO NOT CUT THE CABLE.** Only the cold lead may be cut to suit hook-up in the electrical connection box (ECB).

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Measuring Walkable Area

Warm Tiles Electric Floor Warming Cable for Uncoupling Membrane (DMC) is designed to be used with all available uncoupling membranes and can be laid directly from the spool into the membrane in whatever configuration you need. DMC allows you to install full floor warming coverage wherever you require a heated area. Find each floor section's square area by multiplying the length and width of each walkable floor section. Then add each floor section's walkable square area together for the installation's total walkable square area.

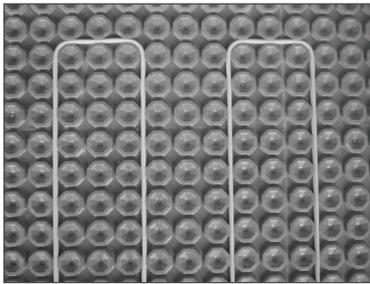


Cable Spacing

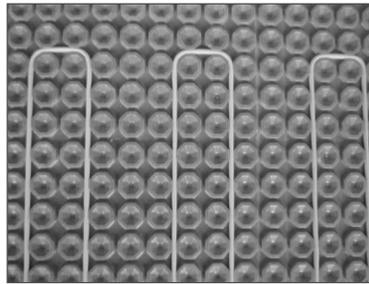
Floor areas may be warmed with a single cable or by using a combination of cables, provided the area to be heated is equal to the sum of the coverage area of the individual cables. Use standard cable spacing for rooms above heated areas. Dense cable spacing can be used for rooms above unheated areas, concrete slabs or high heat loss areas. Alternating cable spacing is used for excess cable or compensating for cable shortage. The same spacing should be used over the entire installation, as non-uniform spacing will result in areas that are either significantly cooler or warmer than other areas.

FLOOR WARMING

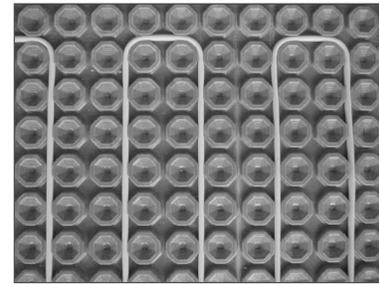
DMC Cable Spacing with Uncoupling Membrane



Standard Cable Spacing

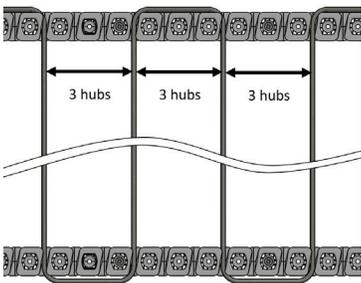


Alternating Cable Spacing

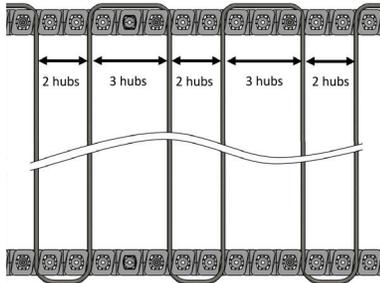


Dense Cable Spacing

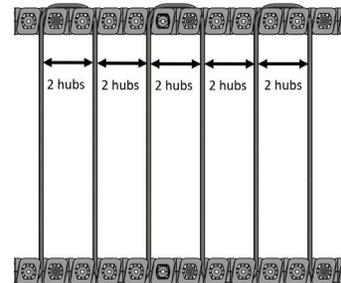
DMC Cable Spacing with DMCS Strapping Strips



Standard Cable Spacing



Alternating Cable Spacing



Dense Cable Spacing

Cables are spaced 3 channels/hubs apart. This results in spacing of 3-3/4 in (90 mm) between cables and provides 12 W/ft².

Cables are spaced alternately 3 channels/hubs apart and 2 channels/hubs apart. This results in spacing of 3-3/4 in (90 mm) and 2-1/2 in (60 mm) between cables and provides 15 W/ft².

Cables are spaced 2 channels/hubs apart. This results in spacing of 2-1/2 in (60 mm) between cables and provides 18 W/ft².

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Cable Length and Power Supply

It is recommended to carefully measure the actual floor area to be heated (Heated Area) and use the product selection chart to verify that each cable is the correct size and voltage. Select 120 Vac or 240 Vac to match your power supply. 240 Vac is generally more economical for areas larger than 70 ft² (6.50 m²). The following heating area tables are based on membranes with 1.25 in (32 mm) spacing. For membranes with other spacing, contact your local sales representative for more information.

DMC 120 Vac Cable Kits

Model Number	Heating Area ft ² (m ²)			Cable Length ft (m)	Current Amps
	Standard Spacing (cables are spaced 3 channels apart) ①	Alternative Spacing (cables are spaced 2 channels apart and 3 channels apart) ②	Dense Spacing (cables are spaced 2 channels apart) ③		
DMC 1012	13-15 (1.2-1.4)	11-12 (1.0-1.2)	8-10 (0.8-0.9)	44 (13)	1.3
DMC 1016	16-20 (1.5-1.9)	13-17 (1.2-1.6)	11-14 (1.0-1.3)	58 (18)	1.7
DMC 1021	22-25 (2.0-2.4)	18-21 (1.7-2.0)	15-17 (1.4-1.6)	76 (23)	2.3
DMC 1025	25-30 (2.3-2.7)	21-25 (1.9-2.3)	17-20 (1.6-1.8)	88 (27)	2.6
DMC 1031	31-37 (2.9-3.5)	26-31 (2.4-2.9)	21-25 (1.9-2.3)	109 (33)	3.3
DMC 1042	39-52 (3.6-4.8)	33-43 (3.0-4.0)	26-34 (2.4-3.2)	145 (44)	4.4
DMC 1053	53-63 (4.9-5.8)	44-52 (4.1-4.9)	35-42 (3.3-3.9)	185 (56)	5.5
DMC 1065	63-77 (5.8-7.1)	52-64 (4.9-5.9)	42-51 (3.9-4.8)	224 (68)	6.7
DMC 1081	80-94 (7.4-8.7)	66-78 (6.2-7.3)	53-63 (4.9-5.8)	277 (85)	8.3
DMC 1097	96-112 (8.9-10.4)	80-94 (7.4-8.7)	64-75 (5.9-7.0)	333 (102)	10.0
DMC 1114	111-134 (10.3-12.5)	92-112 (8.6-10.4)	74-90 (6.9-8.3)	392 (120)	11.8

DMC 240 Vac Cable Kits

Model Number	Heating Area ft ² (m ²)			Cable Length ft (m)	Current Amps
	Standard Spacing (cables are spaced 3 channels apart) ①	Alternative Spacing (cables are spaced 2 channels apart and 3 channels apart) ②	Dense Spacing (cables are spaced 2 channels apart) ③		
DMC 2021	22-25 (2.0-2.3)	18-21 (1.7-1.9)	14-17 (1.3-1.5)	75 (23)	1.1
DMC 2025	25-30 (2.4-2.8)	21-25 (2.0-2.3)	17-20 (1.6-1.8)	88 (27)	1.3
DMC 2031	31-37 (2.9-3.5)	26-31 (2.4-2.9)	21-25 (1.9-2.3)	109 (33)	1.6
DMC 2042	39-52 (3.6-4.8)	33-43 (3.0-4.0)	26-34 (2.4-3.2)	145 (44)	2.2
DMC 2054	54-64 (5.0-6.0)	45-53 (4.2-5.0)	36-43 (3.3-4.0)	189 (58)	2.8
DMC 2063	62-75 (5.7-7.0)	52-62 (4.8-5.8)	41-50 (3.8-4.6)	219 (67)	3.3
DMC 2081	79-97 (7.3-9.0)	65-80 (6.1-7.5)	52-64 (4.9-6.0)	280 (85)	4.2
DMC 2097	94-114 (8.7-10.6)	78-95 (7.3-8.9)	63-76 (5.8-7.1)	333 (102)	5.0
DMC 2113	112-130 (10.4-12.1)	94-109 (8.7-10.1)	75-87 (7.0-8.1)	389 (118)	5.8
DMC 2131	130-150 (12.1-13.9)	108-125 (10.1-11.6)	87-100 (8.0-9.3)	447 (136)	6.7
DMC 2163	157-190 (14.5-17.7)	131-158 (12.1-14.7)	104-127 (9.7-11.8)	555 (169)	8.3
DMC 2196	190-227 (17.7-21.1)	158-189 (14.7-17.5)	127-151 (11.8-14.0)	667 (203)	10.0
DMC 2231	225-265 (20.9-24.6)	187-221 (17.4-20.5)	150-177 (13.9-16.4)	785 (239)	11.8

① Standard for 12 W/ft².

② Alternate for 15 W/ft².

③ Dense for 18 W/ft².

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Product Selection

120 Vac					
Catalog Number	Cable Length ft (m)	Power Consumption (Watts)	Carton Quantity	Carton Weight lb (kg)	UPC
DMC1012	44 (13)	159	2	2.1 (1.0)	01362718810
DMC1016	58 (18)	208	2	2.7 (1.2)	01362718811
DMC1021	76 (23)	274	2	3.1 (1.4)	01362718812
DMC1025	88 (27)	315	2	3.4 (1.5)	01362718813
DMC1031	109 (33)	394	2	3.6 (1.6)	01362718814
DMC1042	145 (44)	522	2	4.0 (1.8)	01362718815
DMC1053	185 (56)	665	2	4.6 (2.1)	01362718816
DMC1065	224 (68)	805	2	5.6 (2.5)	01362718817
DMC1081	277 (85)	998	2	7.2 (3.2)	01362718818
DMC1097	333 (102)	1200	2	8.7 (3.9)	01362718819
DMC1114	392 (120)	1412	2	10.3 (4.6)	01362718820

240 Vac					
Catalog Number	Cable Length ft (m)	Power Consumption (Watts)	Carton Quantity	Carton Weight lb (kg)	UPC
DMC2021	75 (23)	268	2	2.5 (1.1)	01362718821
DMC2025	88 (27)	317	2	3.0 (1.4)	01362718822
DMC2031	109(33)	393	2	3.6 (1.6)	01362718823
DMC2042	145 (44)	522	2	4.7 (2.1)	01362718824
DMC2054	189 (58)	679	2	6.2 (2.8)	01362718825
DMC2063	219 (67)	788	2	7.1 (3.2)	01362718826
DMC2081	280 (85)	1008	2	9.1 (4.1)	01362718827
DMC2097	333 (102)	1200	2	10.9 (4.9)	01362718828
DMC2113	389 (118)	1399	2	12.7 (5.7)	01362718829
DMC2131	447 (136)	1610	2	14.6 (6.6)	01362718830
DMC2163	555 (169)	1997	2	15.5 (7.0)	01362718831
DMC2196	667 (203)	2400	2	16.3 (7.3)	01362718832
DMC2231	785 (239)	2824	2	19.0 (8.6)	01362718833

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