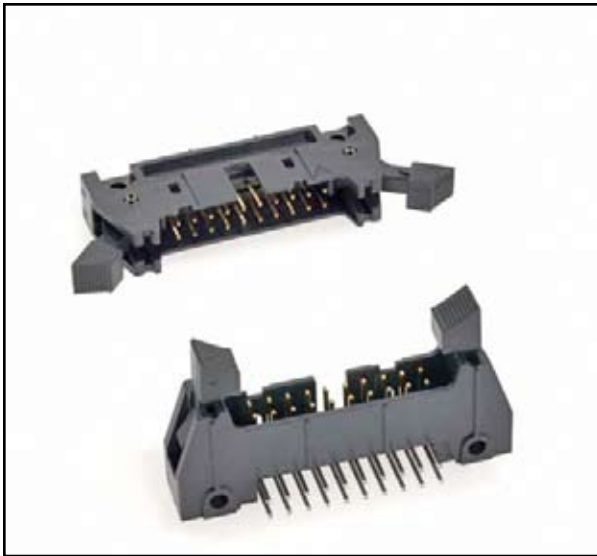


# 3M™ Four-Wall Header

.100" × .100" Latch/Ejector, Straight and Right Angle

D3000 Series



- Military (with 3M's 3518 & N3518 polarizing key) and centerbump polarization
- Optional ejector latches
- Mounting holes for securing header to board
- Optional polarizing posts available
- High temperature insulator suitable for "no lead" soldering operations
- High temperature insulator in through-hole version suitable for "paste in hole" reflow soldering
- See Regulatory Information Appendix for chemical compliance information

Date Modified: September 24, 2008

TS-2245-C  
Sheet 1 of 4

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## Physical

### Insulator:

Material: High Temp Glass Filled Polyester (PCT)

Flammability: UL 94V-0

Color: Black (PCT)

### Contact:

Material: Brass

### Plating:

Underplating: 50-100  $\mu$ " [ 1.25  $\mu$ m ] Ni

Wiping Area: 10  $\mu$ " [ 0.25  $\mu$ m ] Gold

Solder Tails: 40 - 120  $\mu$ " [ 1-3  $\mu$ m ] Matte Tin

**Marking:** 3M Logo, Part Identification Number and Orientation Triangle

---

## Electrical

**Current Rating:** 2 A (EIA 364-70)

**Insulation Resistance:**  $>1 \times 10^9 \Omega$  at 500 V<sub>DC</sub>

**Withstanding Voltage:** 1,000 V<sub>RMS</sub> at Sea Level

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## Environmental

**Temperature Rating:** -55°C to +105°C

**Process Rating:** 260°C single pass, (profile per J-STD-020C)

**Moisture Sensitivity Level:** 1 (per J-STD-020C)

UL File No.: E68080

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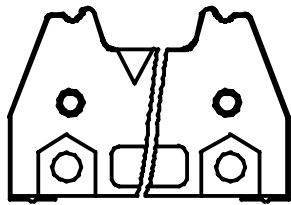
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# 3M™ Four-Wall Header

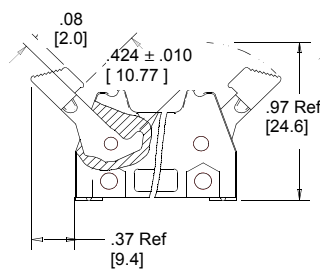
.100" × .100" Latch/Ejector, Straight and Right Angle

D3000 Series

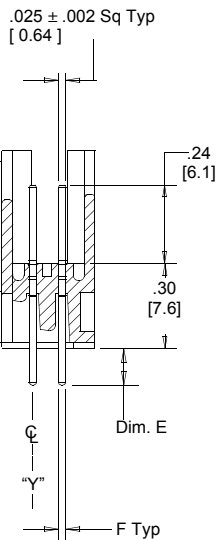
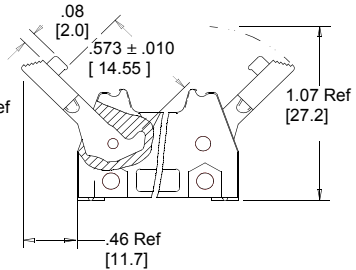
-X0XX  
Header without Latch Ejector



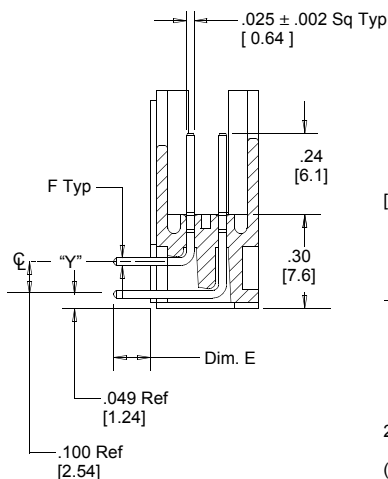
-X2XX  
Header with  
Short Ejector/Latch  
for 3M Sockets without  
Strain Relief



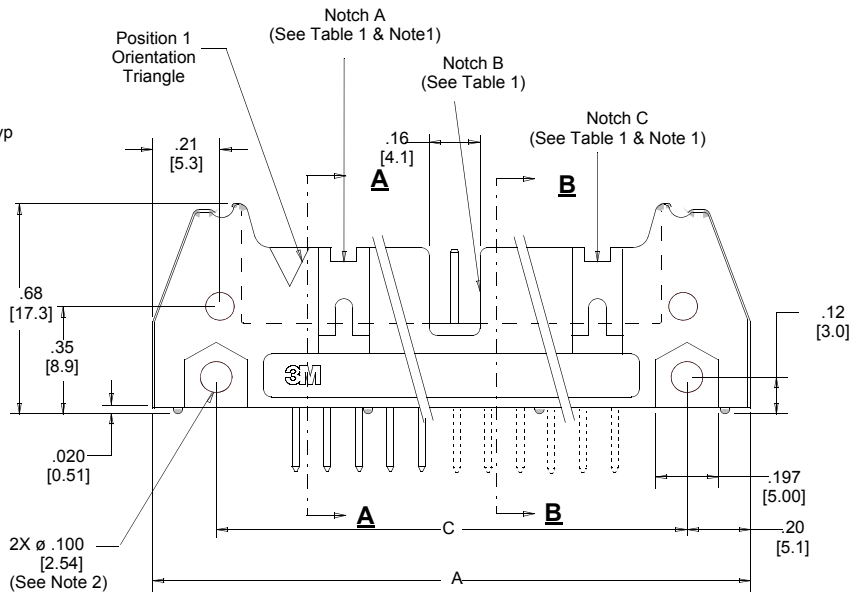
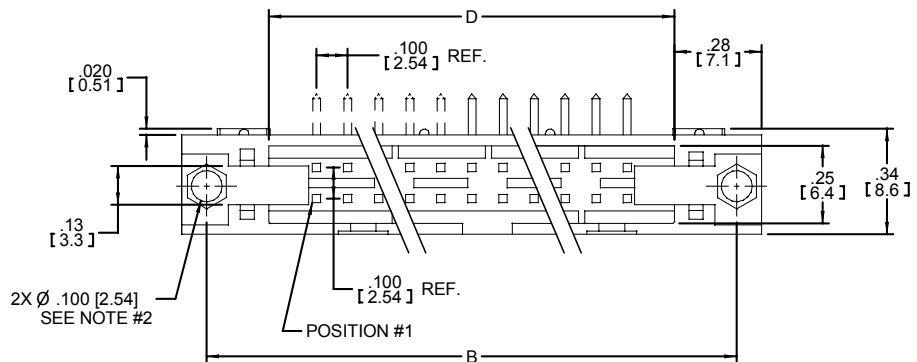
-X3XX  
Header with  
Long Ejector/Latch  
for 3M Sockets with  
Strain Relief



Section A-A  
(Straight)



Section B-B  
(Right Angle)



TS-2245-C  
Sheet 2 of 4

# 3M™ Four-Wall Header

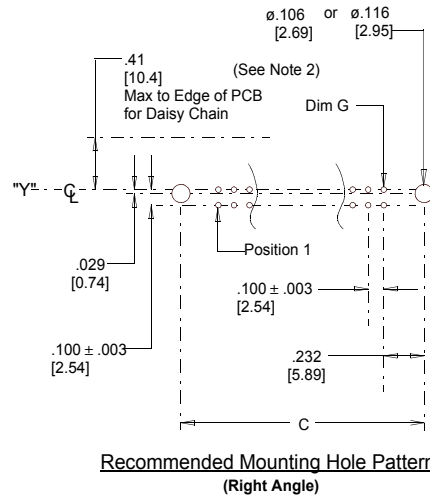
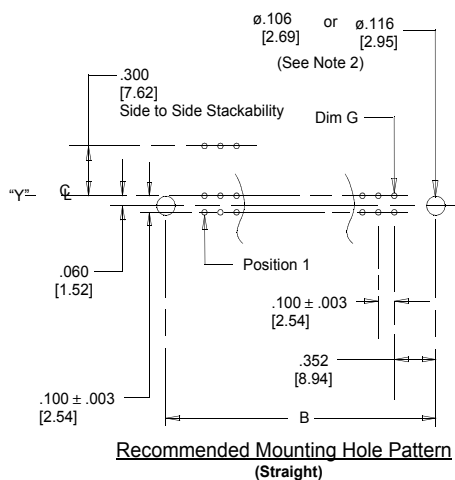
.100" × .100" Latch/Ejector, Straight and Right Angle

D3000 Series

Pin Qty	3M Part Number	Dimensions				Polarizing Notches
		A	B	C	D	
10	3793	1.265 (32.13)	1.104 (28.04)	0.865 (21.97)	0.705 (17.91)	BC
14	3314	1.465 (37.21)	1.304 (33.12)	1.065 (27.05)	0.905 (22.99)	BC
16	3408	1.565 (39.75)	1.404 (35.66)	1.165 (29.59)	1.005 (25.53)	ABC
20	3428	1.765 (44.83)	1.604 (40.74)	1.365 (34.67)	1.205 (30.61)	ABC
24	3627	1.965 (49.91)	1.804 (45.82)	1.565 (39.75)	1.405 (35.69)	ABC
26	3429	2.065 (52.45)	1.904 (48.36)	1.665 (42.29)	1.505 (38.23)	ABC
30	3440	2.265 (57.53)	2.104 (53.44)	1.865 (47.37)	1.705 (43.31)	ABC
34	3431	2.465 (62.61)	2.304 (58.52)	2.065 (52.45)	1.905 (48.39)	ABC
40	3432	2.765 (70.23)	2.604 (66.14)	2.365 (60.07)	2.205 (56.01)	ABC
50	3433	3.265 (82.93)	3.104 (78.84)	2.865 (72.77)	2.705 (68.71)	ABC
60	3372	3.765 (95.63)	3.604 (91.54)	3.365 (85.47)	3.205 (81.41)	ABC
64	3764	3.965 (100.71)	3.804 (96.62)	3.565 (90.55)	3.405 (86.49)	ABC

Inch (mm)		
Tolerance Unless Noted		
	.0	.000
Inch	± .1	± .01
[ ] Dimensions for Reference only		

3M Part Number Suffix	Contact Tail	Dim E	Pin Cross Section			Dimension G
			Dim F	Diagonals	Corner Radii	
-5XX2	Solder Tail for .062 [1.57] Thick PC Board	.112 ± .010 [2.84]	.0245 ± .0005 [0.622]	.028 ± .001 [0.71]	.0075 Ref [0.191]	Ø.035 ± .003 [0.89] (See Note 3)
-6XX2						



**Notes:**

- Notches A & C will accommodate 3M Polarizing Keys (3M Part #3518 or #N3518).
- Mounting hardware: From solder side of pc board use #4-24 thread cutting screw (3M Part # 3341-5) and .116 [2.95] dia mounting hole. For right angle version only, #2-56 bolt and nut (3M Part # 3341-6) with .106 [2.69] dia mounting hole may be used.
- Contact your 3M sales representative for custom requirements.

## Ordering Information

**D3XXX - XX02AR**

Pin Configuration 5 = Right Angle Solder Tails 6 = Straight Solder Tails	3M Part Number (See Table 1)	Plating: AR = 10 µ" [25 µm] Gold (RIA E1 & C1 apply)  Tail 02 = for .062 [1.57] thick board
Latch/Ejector System 0 = No Latch/Ejector installed 2 = Short Roll Pin Latch/Ejectors 3 = Long Roll Pin Latch/Ejectors		

TS-2245-C  
Sheet 3 of 4

# 3M™ Four-Wall Header

.100" × .100" Latch/Ejector, Straight and Right Angle, Accessories

D3000 Series

## Part Customization

This spec sheet details our standard offering.

3M has several capabilities that can provide a part tailored to your specific needs. Ask your 3M sales representative or customer service for more details.

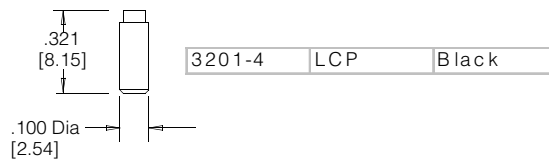
- The -2 & -3 roll pin latches (may be ordered separately with roll pins included)
- Snap-in style latch/ejectors in either short (N3XXXX5XXX) or long (N3XXX-X6XX) styles, may also be ordered separately, and are functional and dimensional equivalents to the -2 and -3 roll pin latches.

If ordering latches separately, please use the below chart

	Short Latch	Long Latch	Latch Style	Color
High Temperature (PPA)	N3505-30B	N3505-31B	Snap In	Black
High Temperature (PCT)	N3505-2B	N3505-3B	Roll Pin	Black

- Selective pin removal (ATA or other compatability)

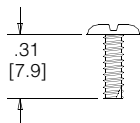
## Polarizing Post



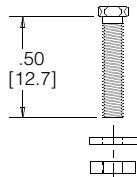
Note: Insert Post into one mounting hardware hole on bottom of header. Set post to protrude .115" [2.92]

## Mounting Hardware

3341-5 (Installed from bottom of board)      3341-6 (Must be inserted prior to latch on vertical headers)



Panhead Thread Cutting Screw:  
#4-24 X 5/16"  
Type: USA Std BT, Federal BG

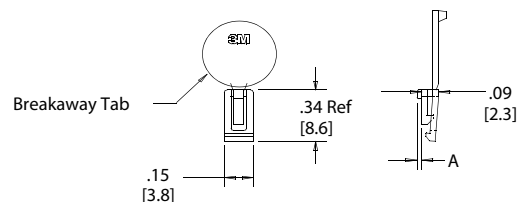


Hex Head Bolt, Nut and Washer  
Bolt - #2-56 X 1/2"

3341-5 & 6  
Material - Stainless Steel

## Polarizing Keys

N3518	LCP	Black	.02
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Note: #2216 B/A Scotchweld can be used to adhere keys.

TS-2245-C  
Sheet 4 of 4



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# Regulatory Information Appendix

## 3M Electronic Solutions Division/Interconnect

### EUROPE

#### Appendix E1: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product is RoHS Compliant 2005/95/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### Appendix E2: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### Appendix E3: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment as amended by Commission Decision 2005/618/EC.

**This product contains lead in the solder tail area in excess of the maximum concentration value allowed.**

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### Appendix E4: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC, as amended by EU Commission Decision 2005/717/EC, as amended by EU Court of Justice Decision 2008/C 116/04

**This product contains decaBDE in the insulating material in excess of the maximum concentration allowed for finished products subject to EU RoHS that are placed on the EU market after June 30, 2008.**

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

## Appendix E5: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product contains lead in excess of the maximum concentration value allowed but is compliant by exemption under Item 6 of the Annex to the Directive.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

## CHINA

### Appendix C1: China RoHS



Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does not** contain any of the following substances in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

### Appendix C2: China RoHS



Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product’s life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements

部件名称 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
端子镀层 (contact plating)	×	○	○	○	○	○
○：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.)						
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.)						

# Appendix C3: China RoHS

Electronic Industry Standard of the People's Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product's life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements

部件名称 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
合金(Metal alloy)	×	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.)  
 ×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.)

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This product will be free from defects in material and manufacture for a period of 90 days from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



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