FLOOR GRAPHIC GUIDE

FOR SCHOOLS & UNIVERSITIES

Presented To:

Provided By:

Supported By:

DRYTAC®

ADHESIVE SCIENCE

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Drytac Overview of

FLOOR GRAPHICS

We Keep You Safe. We offer the correct ratings and insurance backed warranties to make your life easier. With hundreds of certifications on our print media and laminates we'd be happy to help you plan your next project.

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Locations and Surfaces for

FLOOR GRAPHICS

1 Outdoor/Indoor
Smooth Concrete and Brick

2 Outdoor Asphalt

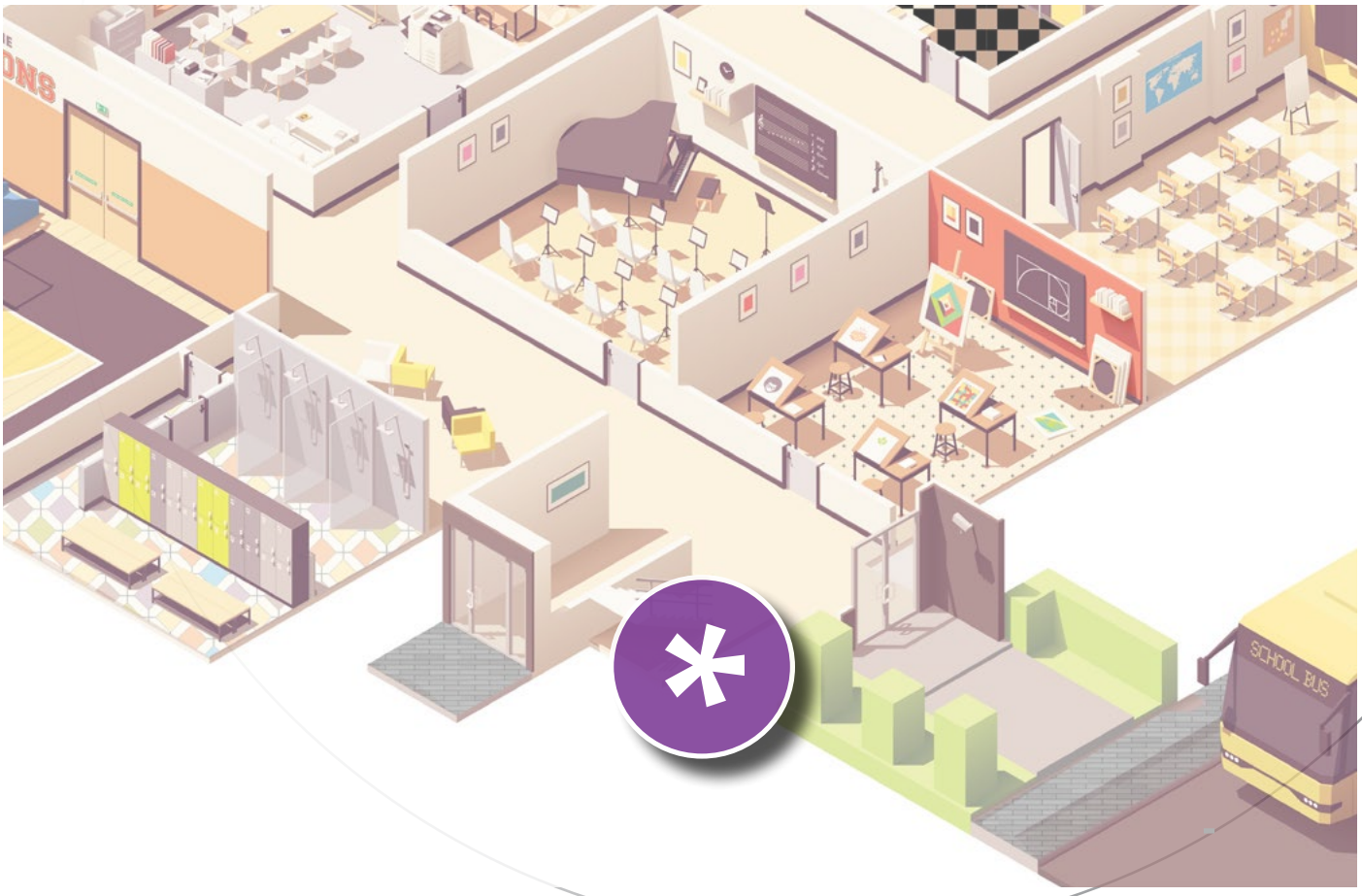
3 Indoor Carpets

4 Indoor Tiles

5 Indoor Hardwood

Drytac Product for

Indoor/Outdoor Smooth Concrete and Brick



Polar Grip with Interlam Pro Emerytex

Two part, fire and slip-rated combination designed for floor graphic use on a variety of smooth outdoor surfaces.

- Long Term - Up to 12 Months Outdoor
- Installed By Experienced Installer
- Low Slip Potential - 36 PTV/BPN (ASTM E303-93)

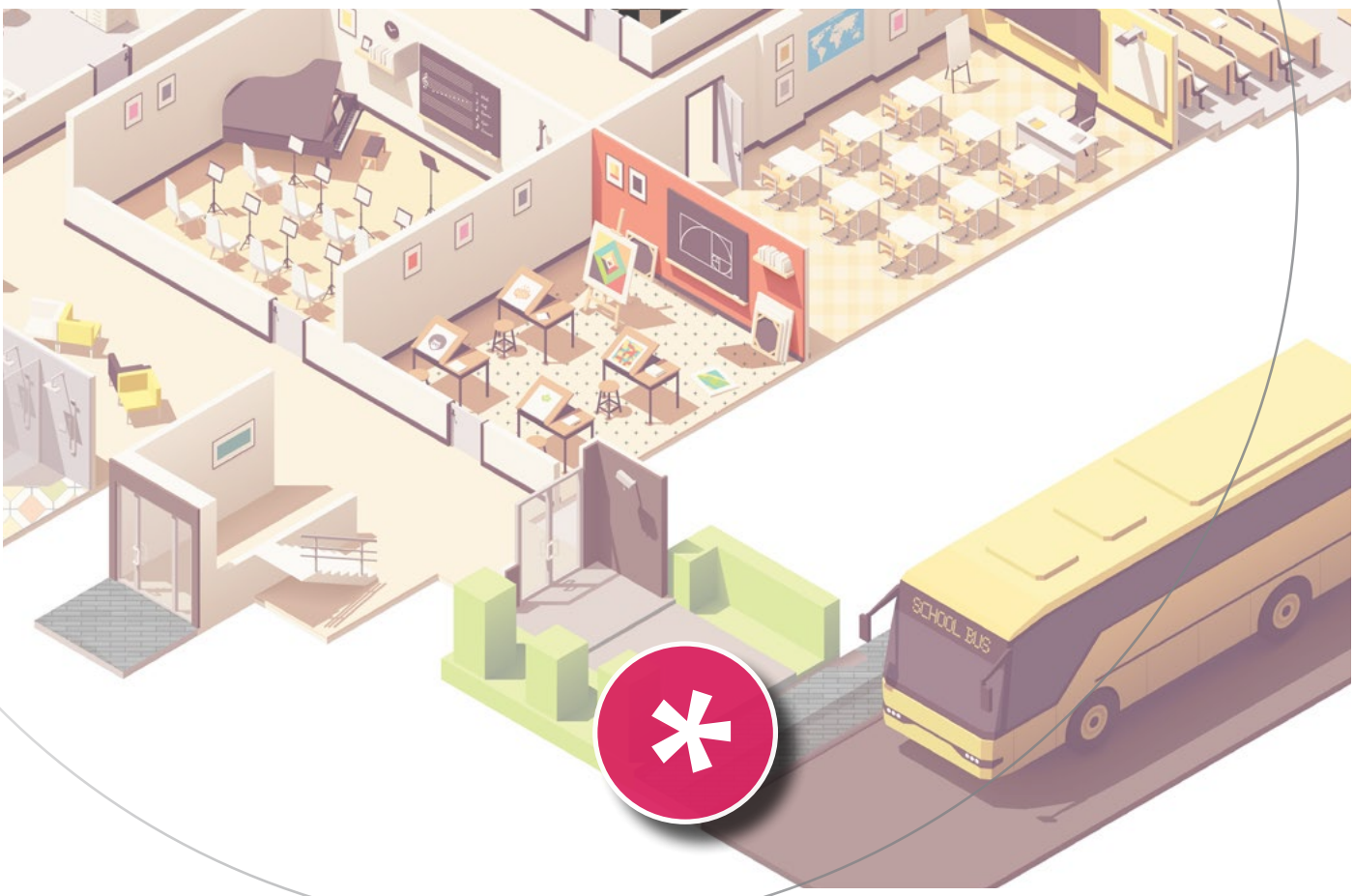
Polar Street FX

One part, fire and slip-rated floor graphic engineered for rough outdoor floor surfaces.

- Long Term - Up to 12 Months Outdoor
- Installed By Experienced Installer
- Low Slip Potential - 72 PTV/BPN (ASTM E303-93)

Drytac Product for

Outdoor Asphalt



Polar Street FX

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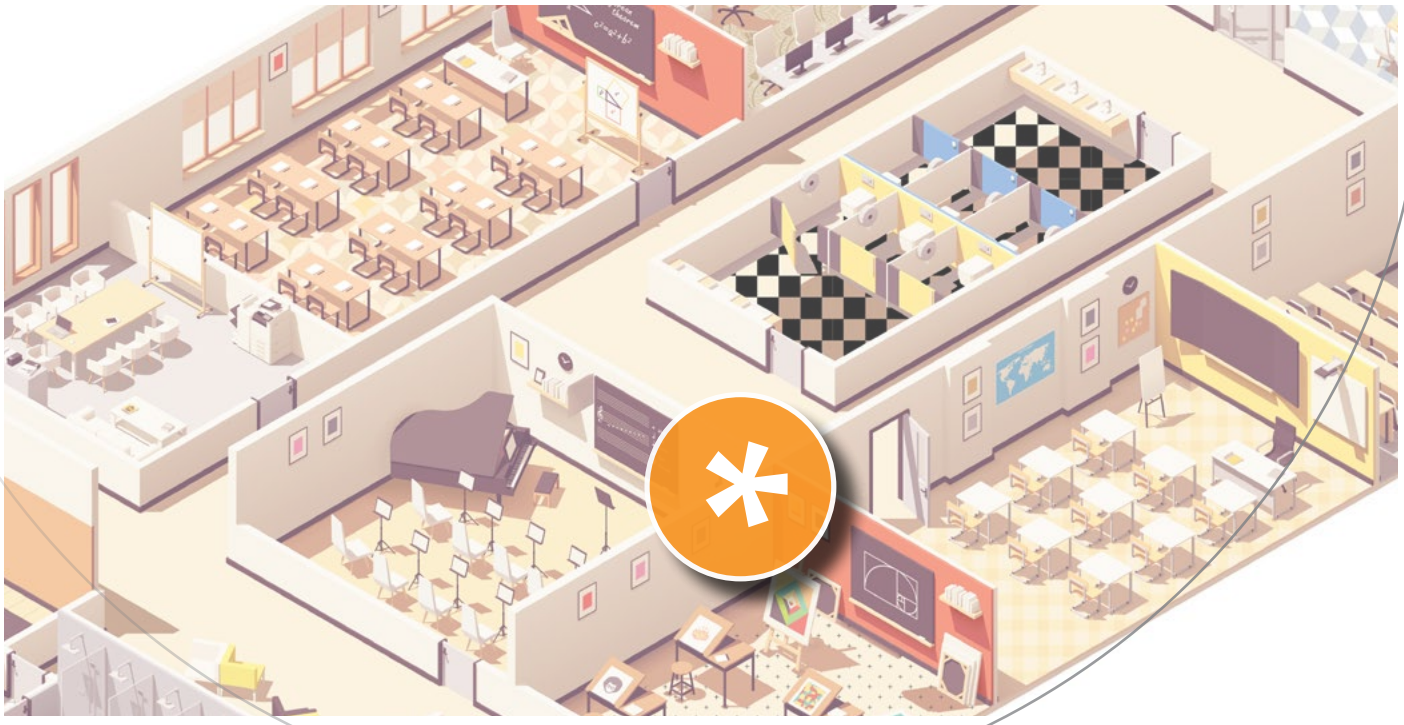
- Installed By Experienced Installer
- Low Slip Potential - 72 PTV/BPN (ASTM E303-93)

Drytac Products for

Indoor Carpets



SpotOn Floor 200

One part, no lamination needed, fire and slip-rated floor graphics for public spaces.

- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee
- Low Slip Potential - 40 PTV/BPN (ASTM E303-93)

FloorTac Textures

One part, fire and slip-rated sand textured floor graphic material for public spaces.

- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee*
- Moderate Slip Potential - 27 PTV/BPN (ASTM E303-93)

FloorTac with Interlam Pro Emerytex

Two part, fire and slip-rated combination designed for floor graphic use on a variety of surfaces.

- Long-Term - Up to 9 Months Indoor
- Installed By Any Employee*
- Low Slip Potential - 36 PTV/BPN (ASTM E303-93)

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* For large panelling and graphics, it is recommended to use an experienced installer.

Drytac Products for

Indoor Tiles

SpotOn Floor 200

One part, no lamination needed, fire and slip-rated floor graphics for public spaces.

- Short-Term - Up to 6 Months Indoor
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- Low Slip Potential - 36 PTV/BPN (ASTM E303-93)

FloorTac Emerytex White RB**

One part, no lamination needed, fire and slip-rated floor graphics for public spaces.

- Long-Term - Up to 9 Months Indoor
- Installed By Any Employee
- Moderate Slip Potential - 32 PTV/BPN (ASTM E303-93)

FloorTac Textures

One part, fire and slip-rated sand textured floor graphic material for public spaces.

- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee*
- Moderate Slip Potential - 27 PTV/BPN (ASTM E303-93)

Polar SandTac Floor**

Economical, one part, no lamination needed, fire and slip-rated floor graphics.

- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee*
- Moderate Slip Potential - 34 PTV/BPN (ASTM E303-93)

Polar Floor PET 170

One part, no lamination needed, fire and slip-rated PVC-free floor graphic material.

- Short-Term - Up to 6 Months Indoor
- Installed By Experienced Installer
- Low Slip Potential - 38 PTV/BPN (ASTM E303-93)

SpotOn SynTac with Interlam EcoTex

Two part, slip-rated combination designed for environmentally friendly floor graphics.

- Long-Term - Up to 12 Months Indoor
- Installed By Any Employee
- Moderate Slip Potential - 25 PTV/BPN (ASTM E303-93)

* For large panelling and graphics, it is recommended to use an experienced installer.

** Only available in the USA

Drytac Products for

Indoor Hardwood

SpotOn Floor 200

One part, no lamination needed, fire and slip-rated floor graphics for public spaces.

- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee
- Low Slip Potential - 40 PTV/BPN (ASTM E303-93)

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- Installed By Any Employee*
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- Short-Term - Up to 6 Months Indoor
- Installed By Any Employee*
- Moderate Slip Potential - 34 PTV/BPN (ASTM E303-93)

Polar Floor PET 170

EASY GREEN SOLUTION

One part, no lamination needed, fire and slip-rated PVC-free floor graphic material.

- Short-Term - Up to 6 Months Indoor
- Installed By Experienced Installer
- Low Slip Potential - 38 PTV/BPN (ASTM E303-93)

SpotOn SynTac with Interlam EcoTex

EASY GREEN SOLUTION

Two part, slip-rated combination designed for environmentally friendly floor graphics.

- Long-Term - Up to 12 Months Indoor
- Installed By Any Employee
- Moderate Slip Potential - 25 PTV/BPN (ASTM E303-93)

* For large panelling and graphics, it is recommended to use an experienced installer.

** Only available in the USA

FLOOR GRAPHICS SOLUTIONS

SpotOn® Floor 200

- **8.0 mil printable textured monomeric PVC film**
- **Unique dot pattern removable adhesive**
- **Up to 6 months indoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **R10** (DIN 51130:2010)
  - **Low Slip Potential** Wet: 40 (ASTM E303-93)
- **Fire Rated**
  - **B1** (DIN 4102-1)
  - **PASS** (CAN/ULC-S102)

FloorTac™ Emerytex

- **8.0 mil printable pebble textured polymeric PVC film**
- **'Anti-lift' gray FloorTac removable adhesive**
- **Up to 9 months indoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **Moderate Slip Potential** (AS HS198:2014) (AS/AZS 4586)
  - **Passed** (ANSI A137.1/A326.3) Interior dry areas that are contaminant free
  - **Moderate Slip Potential** Wet: 32 (ASTM E303-93)
- **Fire Rated**
  - **Class 1 or A** (ASTM E-84)

* Only available in the USA

FloorTac™ Textures

- **6.0 mil printable textured polymeric PVC film**
- **'Anti-lift' gray FloorTac removable adhesive**
- **Up to 6 months indoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **Moderate Slip Potential** (AS HS198:2014) (AS/AZS 4586)
  - **Passed** (ANSI A137.1/A326.3)
  - **Moderate Slip Potential** Wet: 27 (ASTM E303-93)
- **Fire Rated**
  - **Class 1 or A** (ASTM E-84)
  - **PASS** (CAN/ULC-S102)

Polar® SandTac Floor

- **7.0 mil printable textured monomeric PVC film**
- **Solvent acrylic removable adhesive**
- **Up to 6 months indoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **R10** (DIN 51130)
  - **Passed** (ANSI A137.1/A326.3) Interior dry areas that are contaminant free
  - **Moderate Slip Potential** Wet: 34 (ASTM E303-93)
- **Fire Rated**
  - **B1** (DIN 4102-1)

* Only available in the USA

Polar® PET 170

- **6.8 mil printable textured PET film**
- **Clear re-positionable adhesive**
- **Up to 6 months indoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **R10** (DIN 51130)
  - **Passed** (ANSI A137.1/A326.3)
  - **Low Slip Potential** Wet: 38 (ASTM E303-93)
- **Fire Rated**
  - **Bfl-s1** (EN 13501-1)

Polar® Street FX

- **10.0 mil printable textured white aluminium film**
- **High tack clear permanent adhesive**
- **Up to 12 months outdoor durability**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Slip Rated**
  - **Low Slip Potential** Wet: 72 (ASTM E303-93)
- **Fire Rated**
  - **Class 1 or A** (ASTM E-84)

Outdoor Solution

PTV/BPN Values

High Slip Potential: 0-24

Moderate Slip Potential: 25-35

Low Slip Potential: 36+

DRYTAC® ADHESIVE SCIENCE

FLOOR GRAPHICS SOLUTIONS

FloorTac™ with Interlam™ Pro Emerytex®

- **FloorTac: 3.2 mil printable white polymeric PVC film with an 'anti-lift' gray FloorTac removable adhesive**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Fire Rated**
  - **Class A or 0** (ASTM E-84)
  - **PASS** (CAN/ULC-S102)
- **Combined solution up to 9 months indoor durability dependent upon proper installation and foot traffic**
- **Interlam Pro Emerytex: 4.0 mil matte pebble textured monomeric PVC laminating film with an acrylic adhesive**
- **Slip Rated**
  - **Low Slip Potential** Wet: 36 (ASTM E303-93)
  - **R11** (DIN 51130:2010)
  - **PASS** Dry: 62 Wet: 35 (HB198:2014 (AS/NZS 4586))
  - **Acceptable** (ANSI B101.3)
- **Fire Rated**
  - **Class 0** (BS 476 Part 6 and 7)
  - **PASS** (CAN/ULC-S102)

Polar® Grip with Interlam™ Pro Emerytex®

Outdoor Solution

- **Polar Grip: 3.2 mil printable white polymeric PVC film with a high tack grey adhesive**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Fire Rated**
  - **Class C -s1,d0** (EN 13501-1)
  - **Class A or 0** (ASTM E-84)
  - **PASS** (CAN/ULC-S102)
- **Combined solution up to 12 months indoor & outdoor durability dependent upon proper installation and foot traffic**
- **Interlam Pro Emerytex: 4.0 mil matte pebble textured monomeric PVC laminating film with an acrylic adhesive**
- **Slip Rated**
  - **Low Slip Potential** Wet: 36 (ASTM E303-93)
  - **R11** (DIN 51130:2010)
  - **PASS** Dry: 62 Wet: 35 (HB198:2014 (AS/NZS 4586))
  - **Acceptable** (ANSI B101.3)
- **Fire Rated**
  - **Class 0** (BS 476 Part 6 and 7)
  - **PASS** (CAN/ULC-S102)
  - **Class 1 or A** (ASTM E-84)

SpotOn® SynTac™ with Interlam™ EcoTex™

- **SpotOn SynTac: 4.8 mil printable white PP film with a unique dot pattern adhesive**
- **Compatible with (eco) solvent, UV and latex wide-format inkjet printers**
- **Combined solution up to 6 months indoor durability dependent upon proper installation and foot traffic**
- **Interlam EcoTex: 4.8 mil matte pebble textured PP laminating film with an aqueous acrylic adhesive**
- **Slip Rated**
  - **Moderate Slip Potential** Wet: 25 (ASTM E303-93)
  - **R10** (DIN 51130:2010)

PTV/BPN Values

High Slip Potential: 0-24

Moderate Slip Potential: 25-35

Low Slip Potential: 36+

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Legal Responsibility for

FLOOR GRAPHICS

With the surge in demand for floor graphics around the world, we have put together some frequently asked questions to ensure the supplier, the installer, and the application location are educated prior to printing.

What are slip-ratings and why are they important?

Slip ratings and certifications determine the suitability for a given product in a specific environment. They are important to keep consumers safe and avoid any potential hazards.

Why is it important to understand slip certifications?

It's important to fully understand slip certifications as this will have massive impact on the product you decide to use.

What different certifications are available?

In North America there are 3 certifications used to rate the product and advise its suitability for floor applications.

UL 410 Underwriters Laboratories (UL) Standard

This test rates various materials and surfaces as 'slip resistant'. Materials may be listed by UL as slip-resistant if they achieve an index of 0.50 or higher on a James Machine with a 3"-square leather pad. The James Machine measures static coefficient of friction (COF), which is the measure of how slippery a floor is when someone is standing *STILL* on it. *Therefore, this figure is irrelevant to measuring floor slip resistance when a pedestrian is walking across it.* Because the test method uses a dry leather pad, it gives lower COF results than if a Neolite or rubber pad were used, therefore the 0.50 safety criterion is not applicable to friction tests of any kind in which a non-leather pad is used. Unfortunately, it has often been applied in this way, indicating that the floor complies with a safety standard when in fact it does not.

The UL 410 test method is a laboratory-only test using a leather slider to represent shoe bottoms. It was devised roughly 80 years ago to test the floor waxes of the day, which are no longer used but have since been replaced by plastic coatings, lacquers or 'floor finishes'.

Should litigation occur requiring a test of a floor graphic, it would be impractical to use UL 410 because it requires a separate test piece that can be put in a laboratory machine. Thus, passing UL 410 might not help the property manager or location owner. It is seldom used to evaluate hard flooring such as ceramic tile or natural stone.

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ANSI A137.1/A326.3

The ANSI A137.1 standard has been replaced by a newer version, ANSI A326.3, which is essentially the same. The standard uses the BOT-3000E digital tribometer to test and specifies a minimum dynamic coefficient of friction, wet or dry, of 0.42 for safety. This is a very low bar, and we have observed that a floor can pass this criterion and still be very slippery when wet. However, in addition to meeting the 0.42 criterion, the user must consider six other factors: 'type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations. The standard gives no guidance as to how to evaluate the effects of these six factors.

ASTM E303-93 (2013) The Pendulum Test

The ASTM E303 is the same test as British Standard, BS 7976-2:2002 and is also seen as the European Standard EN 13036- 4:2011. The method involves a swinging arm, with a rubber slider mounted on the end that sweeps over the test area. There are two standard sliders, slider 96 (4S) represents average pedestrian footwear and slider 55 (TRL) represents barefoot floor conditions. The friction of the flooring has a direct and measurable effect on the Pendulum Test Value (PTV) given. The test is carried out first in dry conditions and then after contamination with water. Research has confirmed that the Pendulum Test Value (PTV), also known as The British Pendulum Number (BPN) is a more reliable and accurate method for evaluating slip resistance.

Pendulum Test Value - Wet Classification - PTV/BPN

Pendulum Test Value	0-24	25-35	36+
Classification	High Slip Potential	Moderate Slip Potential	Low Slip Potential

ASTM E303-93 (2013)/BS 7976-2/EN 13036-4 Slip Resistance Inclined Surfaces:

To enable a person to walk normally on a slope the floor surface will need to provide a higher level of friction.

On a horizontal floor the minimum recommended Pendulum test value of 36 (PTV) on a wet or contaminated floor, but for every 1 degree of slope the (PTV/BPN) value must increase by approximately 1.75 (PTV). Example: If the slope was 5 degrees the additional value of 9 PTV is required (5 x 1.75PTV) on top of the standard 36 PTV making 45 PTV required for that outside floor surface. Using Slider 96 rubber gives enough information for assessing slipperiness for shod pedestrians. For assessing barefoot areas, Slider 55 rubber is used. (For profiled flooring it may be helpful to use both slider materials.)

Legal Responsibility for

FLOOR GRAPHICS

What test method is recognized by the Occupational Safety and Health Administration (OSHA) in the USA and the Canadian Standards Association (CSA Group) in Canada?

In North America, the Occupational Safety and Health Administration (OSHA) and the Canadian Standards Association (CSA Group) only recommends that floor surfaces are generally anti-slip and puts the responsibility back on the owners of the business or management of the buildings, hence slip and fall lawsuits are unfortunately common place across the country.

According to the U.S. Department of Labor, slips, trips and falls make up the majority of general industry accidents, which account for:

- 15 percent of all accidental deaths per year, the second-leading cause behind motor vehicles
- About 25 percent of all reported injury claims per fiscal year
- More than 95 million lost work days per year – about 65 percent of ALL work days lost

The pendulum test method and its safety standard have international acceptance in courts of law. Although other slip test devices have been used in court, the pendulum test has more extensive and internationally accepted research backing its validity, precision, and repeatability. Simply put, the pendulum slip test is the most researched and most useful slip resistance test available in the world today. Obviously, a pool deck would require more wet slip resistance than a lobby, and the pendulum test is the only slip test that takes this into account.

ASTM E303-93 has been endorsed by the Ceramic Tile Institute of America (CTIOA) for over 15 years.

McDonald's also have adopted this floor testing and specification method for all flooring in their restaurants around the world.

A modification of the pendulum test is also used for indoor and outdoor sports surfaces including running tracks. (ASTM test method F 2157 – 09)

Any accident in either a work or public place will involve the OSHA or the CSA Group, it is also important that a RISK assessment of the location is done prior to application.

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Legal Responsibility for

FLOOR GRAPHICS

Are falls caused by slips?

Contrary to common knowledge most falls are not caused by slips, but trips. So it's more important that any graphics are securely adhered to the surface and there is no lifting of edges which can cause a trip.

How to avoid material lift with floor graphics?

- Test to ensure the adhesive is suitable for the surface. Leave a small printed sample in the required location for 24 hours and check the adhesion.
- If laminating, make sure the Printable PVC has been left for suitable outgassing time after printing, then laminate.
- Make sure the graphics have rounded edges rather than sharper corners.
- CLEAN the floor/surface prior to application – Dirt and contaminants will have a negative effect on the adhesive bond strength to the floor/surface.
- Follow all instructions and guidance provided by Drytac prior to installation.

Who is responsible to make sure the graphic material is suitable for the application and environment?

It is the responsibility of the installer to make sure that all graphic materials are suitable for application based on location and installed as per the recommendations of Drytac.

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Legal Responsibility for

FLOOR GRAPHICS

Any other considerations?

- All floor graphic media will have a life span as recommended by the material manufacturer. Make sure the owner of the location is aware of the life span of the floor graphic material.

- **IMPORTANT:** Floor graphics in higher foot traffic areas will be subject to more abrasion, so it is important that the owner or person responsible for the location has a suitable inspection and maintenance plan for the graphics. Any issues that could cause a hazard, please remove and replace as required.

- It is also the responsibility of your customer to remove any graphics that have come to the end of the product life according to the specifications of the sign maker and your materials manufacturer.

TIP: Print a small date or identification number on the graphic that can advise when the product needs to be replaced.

The installer must hold the correct employer, public and product liability insurance. In addition the product manufacturer also must have the correct product and public liability insurance.

Note: Each location may require a different minimum amount insurance cover, it is important that this is confirmed before installation.

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WARRANTY

Please complete form and send to customerservice@drytac.com to validate warranty

Company Name:
Contact Name:
Email:
Phone Number:

End User Name:
Location Address:
Application Location:
Application Surface:

Product Specified:
Product Batch Number:
Batch PTV/BPN Values:
Printed PTV/BPN Values:

Who Recommended The Product? ☐ Drytac ☐ Dealer ☐ End User Other:

Type of Printer Used:
Ink Type:

Installer Name:
Install Date:

Liability Insurance

All Drytac products have a public and product liability insurance. It is important that all independent installers, print providers and location owners have their own public liability insurance in place.

Based on the above products specified and installed on date applied above, Drytac recommends inspection of these floor graphics to be reviewed by _____ and each month thereafter, and replaced on or before _____, as this could invalidate any insurance liability and protocols due to the stated Drytac product life expectancy on each of floor product systems.

Signature Date

By signing the above, I agree that I have read and understand the various surfaces for floor graphics, technical specifications of floor graphics, legal responsibilities for floor graphics and how to properly install floor graphics from the specified application guide.

Want to fill out the form online? Click here!

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Drytac Overview of
FLOOR GRAPHICS

Drytac Resources:

We've complied several application videos and application guides to help make your life easier.

Application Videos

Application Guides

What Does Drytac Do?

Drytac's unique adhesive science creates print media, protective films, and bonding tapes that deliver outstanding results. We engineer and manufacture solutions for you. We have the ability to create custom solutions to fit your exact needs. With various adhesive and film options we are sure to have the right fit for you.

Drytac Can Help.

Our knowledgeable and experienced staff would be happy to help! With offices, facilities and warehouses around the globe we can provide a solution in a fast and timely manner.

Contact Us Today!

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