TEST REQUESTED BY: ARTO BRICK


Informal Test Method Description: This standard describes the test method for measuring dynamic coefficient of friction (DCOF) of hard surface flooring materials under the wet condition using the BOT 3000E device.

This summary is provided for the reader’s convenience and is not a complete description of the method. See ANSI A326.3 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND 100-Insensifa”
Approximate Size as Received: 12”x12”
Product Color: Rice

TEST DATE: 6/13/2019

TEST PROCEDURE NOTES:

- Sample Prep: None
- The tiles were cleaned with Bona Stone, Tile and Laminate Floor Cleaner prior to testing.
- Three (3) specimens were tested in all four directions with 10” long measurements.
- The SBR sensor was verified using a standard tile prior to testing.
- Testing was performed under wet conditions using 0.05% SLS water
- Testing was conducted under laboratory conditions at approximately 70°F and 50% relative humidity using a calibrated BOT 3000E device (calibration due: 8/22/2019).
- After testing, the SBR sensor was verified again according to the procedure.

TEST RESULTS:

The individual and average DCOF data for each specimen were as follows:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Specimen 1</th>
<th>Specimen 2</th>
<th>Specimen 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction 1</td>
<td>0.54</td>
<td>0.49</td>
<td>0.53</td>
</tr>
<tr>
<td>Direction 2</td>
<td>0.53</td>
<td>0.49</td>
<td>0.53</td>
</tr>
<tr>
<td>Direction 3</td>
<td>0.57</td>
<td>0.50</td>
<td>0.56</td>
</tr>
<tr>
<td>Direction 4</td>
<td>0.58</td>
<td>0.48</td>
<td>0.57</td>
</tr>
<tr>
<td>Average</td>
<td>0.56</td>
<td>0.49</td>
<td>0.55</td>
</tr>
</tbody>
</table>

COMMENTS: None
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND 100-Insensifa”


IMAGE OF PRODUCT TESTED:
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND 100-Insensifa”


ANSI SPECIFICATIONS:

According to the ANSI A326.3, "Unless otherwise specified, hard surface flooring materials suitable for level interior spaces expected to be walked upon when wet with water shall have a wet DCOF of 0.42 or greater when tested using SBR sensor material and SLS solution as per this standard. However, hard surface flooring materials with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine materials appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers’ guidelines and recommendations.”

This paragraph is excerpted from Section 3.1 of the standard. For the complete section, including necessary information for specifiers, this section can be viewed and downloaded at no cost at http://www.tcnatile.com/images/pdfs/ANSI_A326.3_1-18.pdf

DISCLAIMER AND LIMITATION OF LIABILITY

This report is provided for the sole use of the client and no one else. It is intended for professional use by a knowledgeable professional. If published by the client, it must be published in full, including this disclaimer and limitation of liability.

This report is not an endorsement, recommendation, approval, certification, or criticism by TCNA of any particular product or its application. TCNA recommends that anyone considering the use or installation of a particular product consult with the manufacturer or an industry professional for advice specific to the person’s needs and consider any applicable laws, statutes, codes, or regulations relevant to the particular product. TCNA does not know all the different manners and applications in which a client’s particular product might be used, and, therefore, it disclaims any and all duty to provide warnings or to further investigate the suitability of the use of a particular product in a particular situation.

Unless otherwise expressly stated, TCNA tested the specific test subject material provided by the client and identified in the lab report, as indicated by the client. TCNA does not independently verify the information provided by the client, and it makes no representation that similar results would be achieve with other, untested materials, even if such other materials purportedly have the same product name, are purportedly of the same or similar type of tile or product made by the client, or are purportedly from the same batch of tile or product. Nor does TCNA state that the date in this report
is representative of production occurring at the same time or at any other time. Only the manufacturer may make that claim, based on sampling and quality control parameters beyond the knowledge and control of TCNA. TCNA does not provide any supervision, review, management, or quality control of any manufacturer’s production.

TCNA makes no representation that the client’s products are uniform or identical to the test subject material, that the test subject material is suitable for any particular use, application, or installation, or that it will exhibit the same properties when installed or used in a particular manner. The data provided in this report results from standardized laboratory testing performed under laboratory conditions. As such it does not represent all conditions under which the products may be used or subjected. For testing on actual materials being used or considered for a job site, contact TCNA for sampling provisions and possible testing.

This report is intended solely to provide the results of the test procedure stated above as performed on the test subject material provided by the client, and may not be relied on for any other purpose. TCNA MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. IN THE EVENT OF A DISPUTE CONCERNING THIS REPORT, THE EXCLUSIVE REMEDY FOR CLIENT SHALL BE FOR TCNA TO REPEAT THE TEST REQUESTED, BUT IN NO EVENT SHALL TCNA BE LIABLE FOR AN AMOUNT GREATER THAN THE AMOUNT IT RECEIVED FROM CLIENT FOR THE TEST. UNDER NO CIRCUMSTANCES WILL TCNA BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES (NOR SHALL IT BE LIABLE TO ANY OTHER PERSON OR BUSINESS ENTITY FOR ANY DAMAGES), INCLUDING WITHOUT LIMITATION ANY AND ALL DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON THE REPORT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TCNA DISCLAIMS ALL LIABILITY TO ANY THIRD PARTY CONCERNING THIS REPORT. THE FOREGOING LIMITATION OF LIABILITY IS A FUNDAMENTAL ELEMENT OF TCNA’S AGREEMENT TO CONDUCT AND PROVIDE THE REPORT.

Katelyn Simpson
Laboratory Manager

Damon L. McDowell
Laboratory Team Leader

6/17/2019
TCNA TEST REPORT NUMBER: TCNA-0542-19

PAGE: 1 OF 4

TEST REQUESTED BY: ARTO BRICK


Informal Test Method Description: This standard describes the test method for measuring dynamic coefficient of friction (DCOF) of hard surface flooring materials under the wet condition using the BOT 3000E device.

This summary is provided for the reader’s convenience and is not a complete description of the method. See ANSI A326.3 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND-Master Seal”
Approximate Size as Received: 12”x12”
Product Color: Rice

TEST DATE: 6/12/2019

TEST PROCEDURE NOTES:

- Sample Prep: None
- The tiles were cleaned with Bona Stone, Tile and Laminate Floor Cleaner prior to testing.
- Three (3) specimens were tested in all four directions with 10” long measurements.
- The SBR sensor was verified using a standard tile prior to testing.
- Testing was performed under wet conditions using 0.05% SLS water
- Testing was conducted under laboratory conditions at approximately 70°F and 50% relative humidity using a calibrated BOT 3000E device (calibration due: 8/22/2019).
- After testing, the SBR sensor was verified again according to the procedure.

TEST RESULTS:

The individual and average DCOF data for each specimen were as follows:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Specimen 1</th>
<th>Specimen 2</th>
<th>Specimen 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction 1</td>
<td>0.58</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>Direction 2</td>
<td>0.58</td>
<td>0.63</td>
<td>0.65</td>
</tr>
<tr>
<td>Direction 3</td>
<td>0.60</td>
<td>0.69</td>
<td>0.71</td>
</tr>
<tr>
<td>Direction 4</td>
<td>0.62</td>
<td>0.67</td>
<td>0.72</td>
</tr>
<tr>
<td>Average</td>
<td>0.60</td>
<td>0.65</td>
<td>0.67</td>
</tr>
</tbody>
</table>

COMMENTS: None
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND-Master Seal”


IMAGE OF PRODUCT TESTED:
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO-GRIND-Master Seal”


ANSI SPECIFICATIONS:

According to the ANSI A326.3, "Unless otherwise specified, hard surface flooring materials suitable for level interior spaces expected to be walked upon when wet with water shall have a wet DCOF of 0.42 or greater when tested using SBR sensor material and SLS solution as per this standard. However, hard surface flooring materials with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine materials appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers’ guidelines and recommendations.”

This paragraph is excerpted from Section 3.1 of the standard. For the complete section, including necessary information for specifiers, this section can be viewed and downloaded at no cost at http://www.tcnatile.com/images/pdfs/ANSI_A326.3_1-18.pdf

DISCLAIMER AND LIMITATION OF LIABILITY

This report is provided for the sole use of the client and no one else. It is intended for professional use by a knowledgeable professional. If published by the client, it must be published in full, including this disclaimer and limitation of liability.

This report is not an endorsement, recommendation, approval, certification, or criticism by TCNA of any particular product or its application. TCNA recommends that anyone considering the use or installation of a particular product consult with the manufacturer or an industry professional for advice specific to the person’s needs and consider any applicable laws, statutes, codes, or regulations relevant to the particular product. TCNA does not know all the different manners and applications in which a client’s particular product might be used, and, therefore, it disclaims any and all duty to provide warnings or to further investigate the suitability of the use of a particular product in a particular situation.

Unless otherwise expressly stated, TCNA tested the specific test subject material provided by the client and identified in the lab report, as indicated by the client. TCNA does not independently verify the information provided by the client, and it makes no representation that similar results would be achieve with other, untested materials, even if such other materials purportedly have the same product name, are purportedly of the same or similar type of tile or product made by the client, or are purportedly from the same batch of tile or product. Nor does TCNA state that the date in this report

This report is confidential and has been prepared for the exclusive use of the client. It is not an endorsement, approval, certification, or criticism of any product by TCNA. This report shall not be published in any form without prior written consent from TCNA.
is representative of production occurring at the same time or at any other time. Only the manufacturer may make that claim, based on sampling and quality control parameters beyond the knowledge and control of TCNA. TCNA does not provide any supervision, review, management, or quality control of any manufacturer’s production.

TCNA makes no representation that the client’s products are uniform or identical to the test subject material, that the test subject material is suitable for any particular use, application, or installation, or that it will exhibit the same properties when installed or used in a particular manner. The data provided in this report results from standardized laboratory testing performed under laboratory conditions. As such it does not represent all conditions under which the products may be used or subjected. For testing on actual materials being used or considered for a job site, contact TCNA for sampling provisions and possible testing.

This report is intended solely to provide the results of the test procedure stated above as performed on the test subject material provided by the client, and may not be relied on for any other purpose. TCNA MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. IN THE EVENT OF A DISPUTE CONCERNING THIS REPORT, THE EXCLUSIVE REMEDY FOR CLIENT SHALL BE FOR TCNA TO REPEAT THE TEST REQUESTED, BUT IN NO EVENT SHALL TCNA BE LIABLE FOR AN AMOUNT GREATER THAN THE AMOUNT IT RECEIVED FROM CLIENT FOR THE TEST. UNDER NO CIRCUMSTANCES WILL TCNA BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES (NOR SHALL IT BE LIABLE TO ANY OTHER PERSON OR BUSINESS ENTITY FOR ANY DAMAGES), INCLUDING WITHOUT LIMITATION ANY AND ALL DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON THE REPORT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TCNA DISCLAIMS ALL LIABILITY TO ANY THIRD PARTY CONCERNING THIS REPORT. THE FOREGOING LIMITATION OF LIABILITY IS A FUNDAMENTAL ELEMENT OF TCNA’S AGREEMENT TO CONDUCT AND PROVIDE THE REPORT.

Katelyn Simpson
Laboratory Manager

Damon L. McDowell
Laboratory Team Leader

6/17/2019
TCNA TEST REPORT NUMBER: TCNA-0542-19  PAGE: 1 OF 4

TEST REQUESTED BY: ARTO BRICK


Informal Test Method Description: This standard describes the test method for measuring dynamic coefficient of friction (DCOF) of hard surface flooring materials under the wet condition using the BOT 3000E device.

This summary is provided for the reader’s convenience and is not a complete description of the method. See ANSI A326.3 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO GRIND-No Sealer”
Approximate Size as Received: 12”x12”
Product Color: Rice

TEST DATE: 6/13/2019

TEST PROCEDURE NOTES:

- Sample Prep: None
- The tiles were cleaned with Bona Stone, Tile and Laminate Floor Cleaner prior to testing.
- Three (3) specimens were tested in all four directions with 10” long measurements.
- The SBR sensor was verified using a standard tile prior to testing.
- Testing was performed under wet conditions using 0.05% SLS water
- Testing was conducted under laboratory conditions at approximately 70°F and 50% relative humidity using a calibrated BOT 3000E device (calibration due: 8/22/2019).
- After testing, the SBR sensor was verified again according to the procedure.

TEST RESULTS:

The individual and average DCOF data for each specimen were as follows:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Specimen 1</th>
<th>Specimen 2</th>
<th>Specimen 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction 1</td>
<td>0.69</td>
<td>0.72</td>
<td>0.73</td>
</tr>
<tr>
<td>Direction 2</td>
<td>0.76</td>
<td>0.75</td>
<td>0.76</td>
</tr>
<tr>
<td>Direction 3</td>
<td>0.81</td>
<td>0.80</td>
<td>0.78</td>
</tr>
<tr>
<td>Direction 4</td>
<td>0.80</td>
<td>0.78</td>
<td>0.82</td>
</tr>
<tr>
<td>Average</td>
<td>0.77</td>
<td>0.76</td>
<td>0.77</td>
</tr>
</tbody>
</table>

COMMENTS: None
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO GRIND-No Sealer”


IMAGE OF PRODUCT TESTED:
TCNA TEST REPORT NUMBER: TCNA-0542-19

TEST REQUESTED BY: ARTO BRICK

TEST SUBJECT MATERIAL: Identified by client as: “12x12 ARTAZZO GRIND-No Sealer”


ANSI SPECIFICATIONS:

According to the ANSI A326.3, "Unless otherwise specified, hard surface flooring materials suitable for level interior spaces expected to be walked upon when wet with water shall have a wet DCOF of 0.42 or greater when tested using SBR sensor material and SLS solution as per this standard. However, hard surface flooring materials with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine materials appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers’ guidelines and recommendations.”

This paragraph is excerpted from Section 3.1 of the standard. For the complete section, including necessary information for specifiers, this section can be viewed and downloaded at no cost at http://www.tcnatile.com/images/pdfs/ANSI_A326.3_1-18.pdf

DISCLAIMER AND LIMITATION OF LIABILITY

This report is provided for the sole use of the client and no one else. It is intended for professional use by a knowledgeable professional. If published by the client, it must be published in full, including this disclaimer and limitation of liability.

This report is not an endorsement, recommendation, approval, certification, or criticism by TCNA of any particular product or its application. TCNA recommends that anyone considering the use or installation of a particular product consult with the manufacturer or an industry professional for advice specific to the person’s needs and consider any applicable laws, statutes, codes, or regulations relevant to the particular product. TCNA does not know all the different manners and applications in which a client’s particular product might be used, and, therefore, it disclaims any and all duty to provide warnings or to further investigate the suitability of the use of a particular product in a particular situation.

Unless otherwise expressly stated, TCNA tested the specific test subject material provided by the client and identified in the lab report, as indicated by the client. TCNA does not independently verify the information provided by the client, and it makes no representation that similar results would be achieve with other, untested materials, even if such other materials purportedly have the same product name, are purportedly of the same or similar type of tile or product made by the client, or are purportedly from the same batch of tile or product. Nor does TCNA state that the date in this report
is representative of production occurring at the same time or at any other time. Only the manufacturer may make that claim, based on sampling and quality control parameters beyond the knowledge and control of TCNA. TCNA does not provide any supervision, review, management, or quality control of any manufacturer’s production.

TCNA makes no representation that the client’s products are uniform or identical to the test subject material, that the test subject material is suitable for any particular use, application, or installation, or that it will exhibit the same properties when installed or used in a particular manner. The data provided in this report results from standardized laboratory testing performed under laboratory conditions. As such it does not represent all conditions under which the products may be used or subjected. For testing on actual materials being used or considered for a job site, contact TCNA for sampling provisions and possible testing.

This report is intended solely to provide the results of the test procedure stated above as performed on the test subject material provided by the client, and may not be relied on for any other purpose. TCNA MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. IN THE EVENT OF A DISPUTE CONCERNING THIS REPORT, THE EXCLUSIVE REMEDY FOR CLIENT SHALL BE FOR TCNA TO REPEAT THE TEST REQUESTED, BUT IN NO EVENT SHALL TCNA BE LIABLE FOR AN AMOUNT GREATER THAN THE AMOUNT IT RECEIVED FROM CLIENT FOR THE TEST. UNDER NO CIRCUMSTANCES WILL TCNA BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES (NOR SHALL IT BE LIABLE TO ANY OTHER PERSON OR BUSINESS ENTITY FOR ANY DAMAGES), INCLUDING WITHOUT LIMITATION ANY AND ALL DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON THE REPORT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TCNA DISCLAIMS ALL LIABILITY TO ANY THIRD PARTY CONCERNING THIS REPORT. THE FOREGOING LIMITATION OF LIABILITY IS A FUNDAMENTAL ELEMENT OF TCNA’S AGREEMENT TO CONDUCT AND PROVIDE THE REPORT.

Katelyn Simpson
Laboratory Manager

Damon L. McDowell
Laboratory Team Leader

6/17/2019