



ASTM INTERNATIONAL  
Helping our world work better

# Examples of Good Regulatory Cooperation and Effective Utilization of Standards to Support Regional Needs

US-SADC Exchange on Good Regulatory Practices with SADCSTAN and SADCTRLC  
Garden Court Hotel, Johannesburg, South Africa –  
June 2, 2015

Len Morrissey - Director, Technical Committee Operations

[www.astm.org](http://www.astm.org)

# Collaboration with Governments



## ASTM looks for close collaboration

- Based on strong relationships with National Standards Bodies
  - 88 individual Memorandums of Understanding (MoU) and 4 regional agreements
- In the process, ASTM finds both public and private partnerships for the development of high quality standards and global relevance
  - Focus is on science and technology
- ASTM standards are referenced by governments around the world for their high market relevance
  - No ASTM standard has been ever been cited by the World Trade Organization as a Technical Barrier to Trade



# Six Ways to Adopt and Reference ASTM

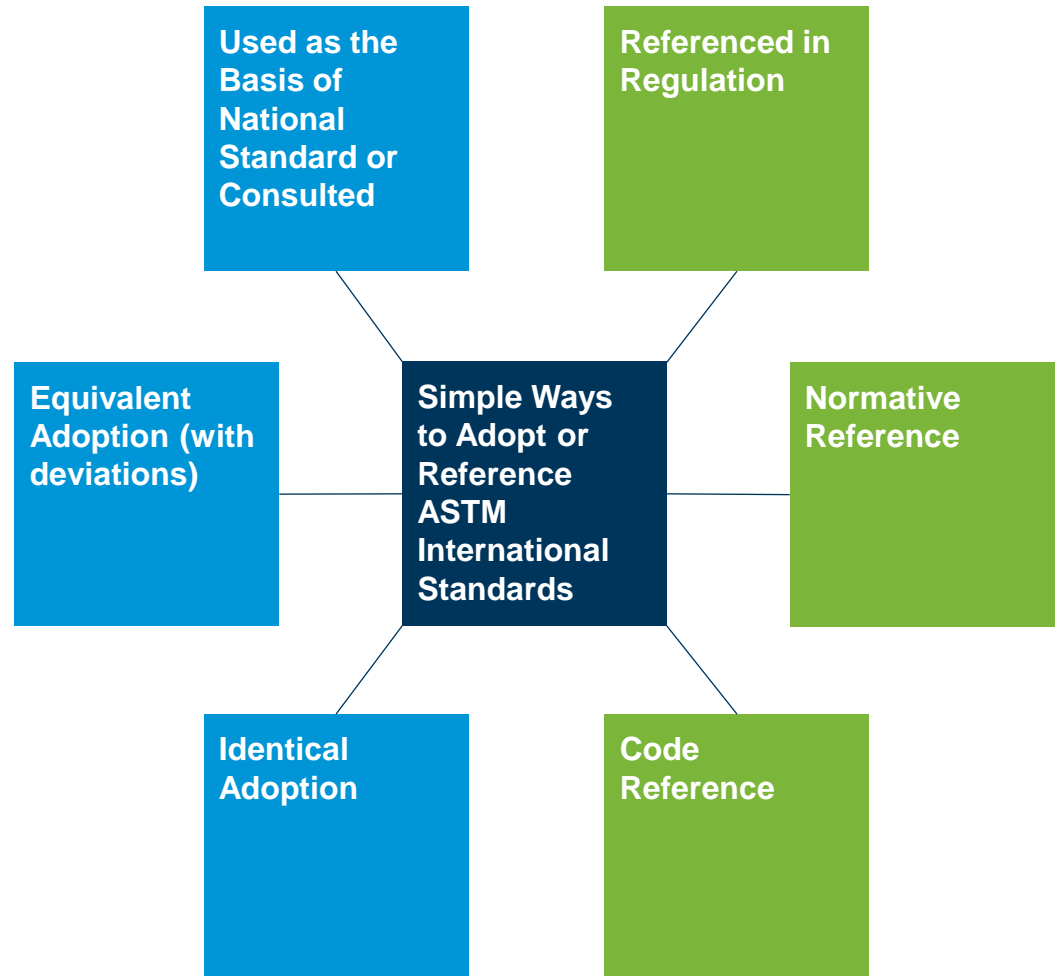


Available to all Public and Private Standards' Users

- Referenced in Regulations
- Normative Reference
- Code Reference

Available Only to MoU Partners

- Identical Adoption
- Equivalent Adoption
- Used as the Basis of a National Standard or Consulted



# Uses of ASTM International Standards



## Referenced in Regulation

ASTM International standard is called out, either in whole or in part, in a regulation, law, decree, rule, act, directive, order, edict, etc. (i.e. any official government document other than a National Standard) The content of the ASTM standard, either in whole or in part, is intended to be used as an additional requirement of the new regulation

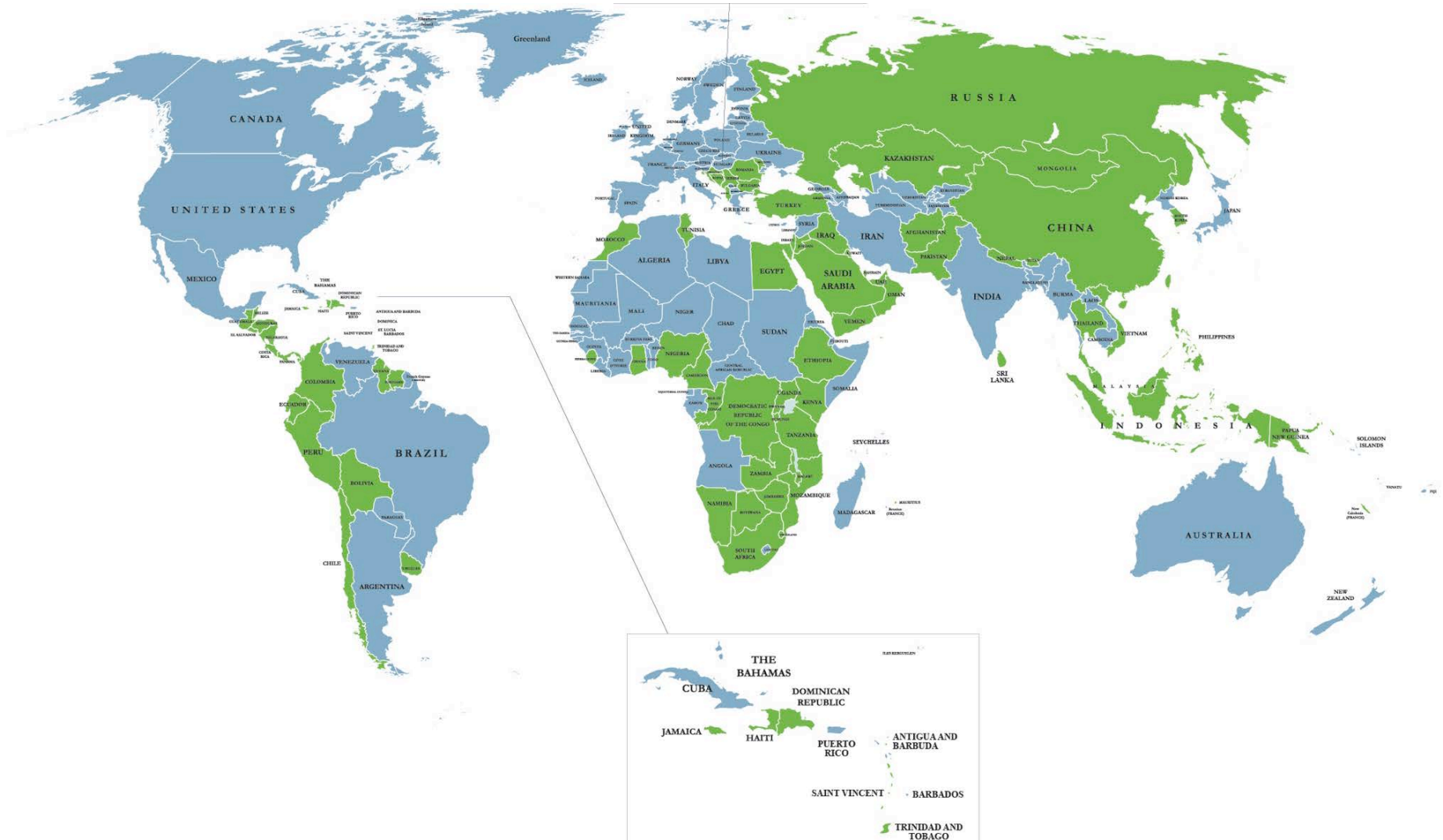
6,525

ASTM standards have been adopted, used as a reference, or used as the basis of national standards outside the USA

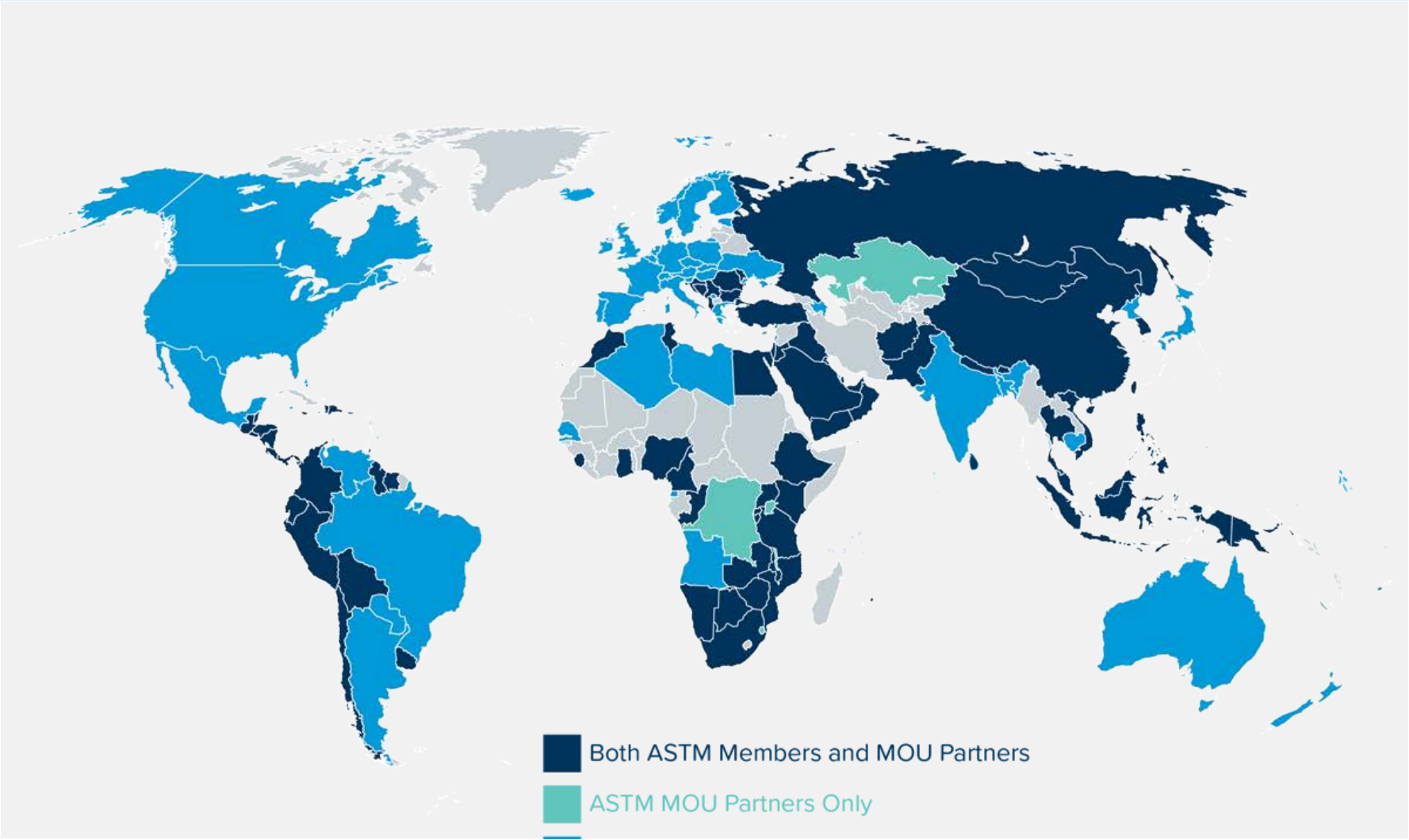


ASIA	EUROPE	SOUTH AMERICA	CARIBBEAN	MIDDLE EAST & NORTH AFRICA	EASTERN, WESTERN & CENTRAL AFRICA	SOUTHERN AFRICA
AFGHANISTAN	ALBANIA*	BOLIVIA	ANTIGUA AND BARBUDA	BAHRAIN	CAMEROON	BOTSWANA
BHUTAN	BOSNIA	CHILE	BELIZE	EGYPT	DEMOCRATIC REPUBLIC OF CONGO	MALAWI
BRUNEI DARUSSALAM	BULGARIA	COLOMBIA	CROSQ	GCC (GULF STATES)	ETHIOPIA	MAURITIUS
CHINA	CROATIA	COSTA RICA	DOMINICA	IRAQ	GHANA	SEYCHELLES
INDONESIA	KAZAKHSTAN	ECUADOR	DOMINICAN REPUBLIC	ISRAEL	KENYA	SOUTHERN AFRICA DEVELOPMENT COOPERATION
KOREA	KOSOVO	EL SALVADOR	GRENADA	JORDAN	MOZAMBIQUE	SOUTH AFRICA
MALAYSIA	MOLDOVA	GUATEMALA	GUYANA	KUWAIT	NIGERIA	SWAZILAND
MONGOLIA	ROMANIA*	HONDURAS	HAITI	MOROCCO	RWANDA	ZAMBIA
NEPAL	RUSSIA	NICARAGUA	JAMAICA	OMAN	SIERRA LEONE	ZIMBABWE
PAKISTAN	SERBIA	PANAMA	ST. LUCIA	PALESTINE	TANZANIA	
PAPUA NEW GUINEA		PERU	ST. VINCENT AND THE GRENADINES	QATAR	UGANDA	
PHILIPPINES		SURINAM	TRINIDAD & TOBAGO	SAUDI ARABIA	* Former MOU Partner	
SINGAPORE		URUGUAY		TUNISIA		
SRI LANKA				TURKEY		
TAIWAN				U.A.E.		
VIETNAM				YEMEN		

# ASTM MoU Partners



# Global Membership



# Referenced in Regulation



## GOVERNMENT NOTICES

### SOUTH AFRICAN REVENUE SERVICE

**No. R. 1334**

**CUSTOMS AND EXCISE ACT, 1964.  
AMENDMENT OF SCHEDULE NO. 1 (No. 1/1/1367)**

Under section 48 of the Customs and Excise Act, 1964, Part 1 of Schedule No. 1 to the said Act is hereby amended, with effect from 1 January 2009, to the

#### SCHEDULE

By the substitution for the **ADDITIONAL NOTES** to **CHAPTER 27** of the following:

#### ADDITIONAL NOTES:

1. Specifications:

In this Chapter the following expressions shall be deemed to refer to hydrocarbon fuels and oils which are liquid at normal temperature and pressure (20°C) all of the specifications hereunder assigned thereto or with any other specifications accepted or determined by the Commissioner (unless otherwise stated, determined by the methods specified below) provided the intended uses of such fuels and oils are considered by the Commissioner in every case to be as such fuels and oils.

Methods to determine Specification Properties:

Distillation: ASTM D86/IP123

Density: ASTM D1298/4052

Knock Rating: ASTM D2700/IP236

Smoke Point: ASTM D1322/IP57

Sulphur Content: ASTM D2622/IP336

Kinematic Viscosity: ASTM D445/IP71





# Uses of ASTM International Standards



## Normative Reference

ASTM International standard (title only) is called out in the text of National Standard and its title also appears in the “Referenced Documents” section of the National Standard. The content of the ASTM standard, either in whole or in part, is intended to be used as an additional requirement of the new National Standard

# 7

ASTM International complies with all 7 principles of an International Standards Developer as defined by the WTO

# Normative Reference



## INTERNATIONAL STANDARD ISO 13947

First edition  
2007-02-15

### Metallic powders — Test method for the determination of non-metallic inclusions in metal powders using a powder-forged specimen

*Poudres métalliques — Détermination de la teneur en inclusions non métalliques dans les poudres métalliques à l'aide d'une éprouvette forgée de poudre*

such that the core region contains porosity. At the magnification used for this test method, residual porosity is hard to distinguish from inclusions. Too much residual porosity makes a meaningful assessment of the inclusion population impossible.

This test method may be applied to materials that contain manganese sulfide (admixed or prealloyed), provided the near-neighbour separation distance is changed from 30  $\mu\text{m}$  to 15  $\mu\text{m}$ .

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TR 14321:1997, *Sintered metal materials, excluding hardmetals — Metallographic preparation and examination*

**ASTM B 796-02**, *Standard test method for nonmetallic inclusion content of powders intended for powder forging (P/F) applications*

ASTM E 3-01, *Standard practice for preparation of metallographic specimens*

ASTM E 768-99, *Standard practice for preparing and evaluating specimens for automatic inclusion assessment of steel*

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# Uses of ASTM International Standards



## Code Reference

A code consists of requirements and referenced standards that a jurisdiction or authority enforces through legislation, statutes, contracts etc. A jurisdiction or authority can adopt a model code without changing it, modify part of the code, or develop its own code. Examples of such codes include the International Building Code of the International Code Council (ICC) or the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME).

# 450

More than 450 ASTM standards are referenced in the International Building Code

# Benefits of Direct Reference



- Minimizes duplication and conflicting guidance in industry
- Able to stay current with most up-to-date technology generated by industry experts around the world
- Reduces development time for new regulations and eliminate costs associated with developing new country specific regulations

CHAPTER 12		
REFERENCED STANDARDS		
<p>This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.4.</p>		
<p><b>ASME</b> American Society of Mechanical Engineers Three Park Avenue New York, NY 10018-5990</p>		
Standard reference number	Title	Referenced in code section number
A112.18.1/CSA B125.1—2010	Plumbing Supply Fittings .....	Table 702.1, Table 702.1.1(2), 702.2
<p><b>ASHRAE</b> American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. 1791 Tullie Circle Atlanta, GA 30329-2305</p>		
Standard reference number	Title	Referenced in code section number
55-2004	Thermal Environmental Conditions on Human Occupancy.....	807.6.1, 803.2, C102.6.1
62.1-2010	Ventilation for Acceptable Indoor Air Quality.....	605.3, 607.3, C102.6.1
90.1-2010	Energy Standard for Buildings Except Low-rise Residential Buildings (ANSI/ASHRAE/IESNA 90.1-2007).....	613.4.2.1, 613.4.2.2, 613.4.5, 613.5.3
140-2010	Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs.....	802.3.2
189.1—2009	Standard for the Design of High Performance Green Buildings, Except Low Rise Residential Buildings.....	302.1, Table 302.1
<p><b>ASSE</b> American Society of Mechanical Engineers Three Park Avenue New York, NY 10018-5990</p>		
Standard reference number	Title	Referenced in code section number
1016—2010	Performance Requirements for Automatic Compensating, Valves for Individual Showers and Tub/Shower Combinations.....	Table 702.1, Table 702.1.1(2)
<p><b>ASTM</b> ASTM International 100 Barr Harbor West Conshohocken, PA 19428-2959</p>		
Standard reference number	Title	Referenced in code section number
C5-10	Standard Specification for Quicklime for Structural Purpose.....	507.5.10
C208-03(2009)	Standard Specification for Finishing Hydrated Lime.....	507.5.10
C1371-04a	Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emmissometers.....	404.3.1.1
C1549-09	Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature.....	

# Memorandum of Understanding (MoU)

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## ASTM

- Provides a full collection of ASTM standards as a resource
- Offers membership to technical experts at no charge
- Offers training programs to industry and government

## Signatory

- Enables view only access to ASTM standards through a link in the Information Center
- Provides an annual report
- Can adopt or use ASTM International standards to develop national standards

# Additional Uses of ASTM International Standards for MoU Countries



## Adopted as an Identical Standard

- ASTM International standard is considered, in its entirety, to be the National Standard recognized by the National Standards Body

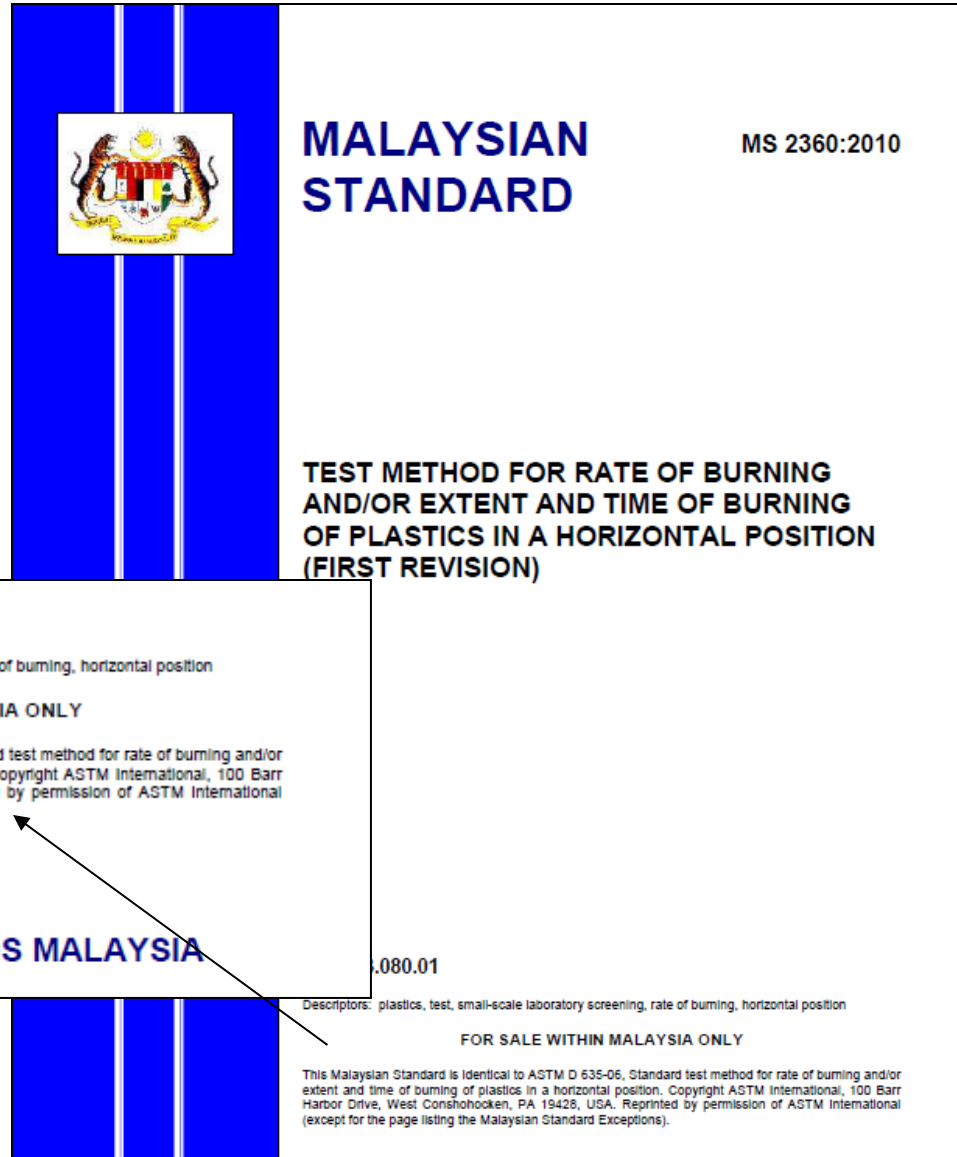
## Adopted as an Equivalent Standard

- ASTM International standard is considered, with limited deviation, to be the National Standard recognized by the National Standards Body

“ASTM standards help us develop our national standards and are deeply utilized in industries such as construction, petroleum products and medical equipment.”  
STAMEQ, Vietnam

NOTE: Refer to each individual MoU agreement for specific requirements

# Identical National Adoption of an ASTM standard



**MALAYSIAN STANDARD** MS 2360:2010

**TEST METHOD FOR RATE OF BURNING AND/OR EXTENT AND TIME OF BURNING OF PLASTICS IN A HORIZONTAL POSITION (FIRST REVISION)**

ICS: 83.080.01

Descriptors: plastics, test, small-scale laboratory screening, rate of burning, horizontal position

**FOR SALE WITHIN MALAYSIA ONLY**

This Malaysian Standard is identical to ASTM D 635-06, Standard test method for rate of burning and/or extent and time of burning of plastics in a horizontal position. Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, USA. Reprinted by permission of ASTM International (except for the page listing the Malaysian Standard Exceptions).

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**DEPARTMENT OF STANDARDS MALAYSIA**

.080.01

Descriptors: plastics, test, small-scale laboratory screening, rate of burning, horizontal position

**FOR SALE WITHIN MALAYSIA ONLY**

This Malaysian Standard is identical to ASTM D 635-06, Standard test method for rate of burning and/or extent and time of burning of plastics in a horizontal position. Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, USA. Reprinted by permission of ASTM International (except for the page listing the Malaysian Standard Exceptions).

# Equivalent National Adoption of an ASTM standard



## PHILIPPINE NATIONAL STANDARD

PNS ASTM C 1048:2013  
(ASTM published 2012  
with Amendment 1:2013)  
ICS 81.040.20

Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass



BUREAU OF PRODUCT STANDARDS

Member to the International Organization for Standardization (ISO)  
Standards and Conformance Portal: [www.bps.dti.gov.ph](http://www.bps.dti.gov.ph)



PHILIPPINE NATIONAL STANDARD

PNS ASTM C 1048:2013  
Amendment 1:2013

### Amendment

This amendment to the PNS ASTM C 1048:2013 was prepared by the Bureau of Product Standards Technical Committee on Glass and Glass Products (BPS/TC 28).

Clause/ Sub-clause	Modification
6.1.11	Delete the whole subclause 6.1.11
11.1	Replace the whole text of subclause 11.1 with the following: The identification marking shall include the manufacturer's name or trademark, and the designation of heat-strengthened or tempered, or an abbreviation such as HS or T.
11.1.2	Delete the whole subclause

### Explanation

The amendment to the original text of ASTM C1048 was prepared to emphasize the requirement for permanent identification marking.



# Requirements for Adoptions



To provide ASTM written notice of the ASTM Standards it plans to adopt and will obtain written approval from ASTM prior to such adoption;

To publish its adoptions (derivative works) of ASTM Standards without, as much as possible, change to the original and agrees to maintain the integrity of the ASTM Standards;

Not to assign or transfer any rights it may have in its Adoptions, and not to submit or provide ASTM standards or its Adoptions to any other standards body(s) or organizations (whether national, international or other) for use, review or approval, without the prior written consent of ASTM International's President;

To provide ASTM International with electronic files of the Adoptions;

To provide recognition: "This National Standard is identical to ASTM XXXX-XX, Title, Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, USA. Published and reprinted pursuant to license agreement with ASTM International";

To acknowledge and agree that the adoption, enactment, reference, or incorporation of any of the ASTM Standards by any government or agency, including the national standards body, has not and will not effect, transfer, modify or alter the copyrights of the ASTM Standards in any way;

To provide ASTM with a complete list of its adopted ASTM Standards in the Annual Report to ASTM or upon request.

**NOTE:** Refer to each individual MoU for specific requirements

# Additional Uses of ASTM International Standards for MoU Countries

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## Used as the Basis of a National Standard

- ASTM International standard is reviewed by national technical experts during the development process and used as the basis of a new National Standard for the National Standards Body.

## Consulted

- ASTM document is reviewed by national technical experts during the development process of a new National Standard for the National Standards Body

Caution: Although these two methods are authorized under the terms of the MoU, technical information used in this manner may quickly become outdated.

# As the Basis of a National Standard



This national standard is based on ASTM C969...



INTE CTN 16

Fecha: 2009-03-30

INTE 16-11-19-09

Primera edición

Secretaría: INTECO

## Ensayo de infiltración y exfiltración de tuberías de concreto instaladas para alcantarillado

CORRESPONDENCIA: Esta norma nacional corresponde con la norma ASTM C969M-02, "Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines [Metric]".

ICS:91.100.30  
Editada e impresa por  
INTECO

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LAS OBSERVACIONES A ESTE DOCUMENTO DIRIGIRLAS A:  
INSTITUTO DE NORMAS TECNICAS DE COSTA RICA

Teléfono: (506) 2283 4522 Fax: (506) 2283 4831 Apartado: 10004-1000  
Email: [Info@inteco.or.cr](mailto:Info@inteco.or.cr) Web: [www.inteco.or.cr](http://www.inteco.or.cr)

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# The MoU Annual Report



## Annual Report to ASTM International on the standardization activities of:



Initiated in 2001, ASTM International's MOU program promotes communication between ASTM International and national standards bodies (NSB's) worldwide, fostering awareness of the standardization systems of all parties involved. The program also facilitates the development of national standards that will aid each country's health, safety, environmental, and economic conditions. These agreements help avoid duplication of effort where possible and mutually promote the standards development activities of ASTM International and the national standards bodies participating in the program. In addition, MOUs are designed to encourage, increase, and facilitate the participation of technical experts from around the world in the ASTM standards development process and broaden the global acceptance and use of ASTM International standards.

This report form should be submitted to the Vice President, Global Cooperation annually on the anniversary date of the MoU agreement signing. Failure to complete the required report may impact an NSB's eligibility for Technical Assistance and Standards Expert Programs. Email the completed form to: [fdougherty@astm.org](mailto:fdougherty@astm.org) Or Fax to: 610-834-3652.

Date:

<b>Reporting Time Period</b>	From: <input type="text"/>	To: <input type="text"/>
<b>Prepared By</b>	Name: <input type="text"/>	E-Mail: <input type="text"/>
<b>Head of NSB</b>	Name: <input type="text"/>	E-Mail: <input type="text"/>

### Use of ASTM International Standards

+ (\*see description of each category below)

Number of ASTM International Standards consulted in preparation of National Standards: <input type="text"/>	Number of ASTM International Standards used as reference documents/normative references (not equivalent or identical): <input type="text"/>
Number of ASTM International Standards adopted as an equivalent standard: <input type="text"/>	Number of ASTM International Standards adopted as identical standards: <input type="text"/>
Number of ASTM International Standards sold: (Please note only countries with negotiated business agreements are authorized to sell ASTM International Standards): <input type="text"/>	Number of ASTM International Standards referenced in Regulations: <input type="text"/>

(Note: Please attach a list of documents for each category reported above)

### Other:

Link to ASTM International Website	Yes/No: <input type="checkbox"/>	URL: <input type="text"/>
Number of new participants on ASTM International Committees	<input type="text"/>	Committees: <input type="text"/>

## Due each year on the Anniversary date of the MoU signing

Recruited partners for related ASTM International Initiatives (e.g. Interlaboratory Cross-Check Programs, Technical and Professional Training Programs)	Partners: <input type="text"/>
Please share a success story of how collaboration between our organizations resulted in a standard or regulation that is addressing key issues.	<input type="text"/>
Please comment if there are other ways in which ASTM can assist with your standardization efforts	<input type="text"/>

Botswana	BOBS	2007	47	5	0	Attached Staff 2012 - Jonathan Ernest
Burundi	BBN	2014	0	1	0	
Cameroon	ANOR	2013	0	0	1	
Congo	OCC	2007	0	0	0	
Egypt	EOS	2002	608	46	47	
Ethiopia	ESA	2005	443	17	7	
Ghana	GSA	2007	333	10	7	Standards Expert 2009 - Adelaide Teimle Leigh; Technical Visitor Grant Program 2014 - Nana Gyan Sekyi
Kenya	KEBS	2005	343	4	7	
Malawi	MBS	2013	84	0	0	
Mauritius	MSB	2005	174	0	2	
Morocco	IMANOR	2003	71	1	0	
Mozambique	INNOQ	2008	38	3	0	
Namibia	NSI	2014	0	0	1	
Nigeria	SON	2004	150	40	99	
Rwanda	RSB	2009	188	0	0	
SADC	SADC	2008	2	0	0	
Seychelles	SBS	2014	0	1	0	
Sierra Leone	SLSB	2013	0	0	0	
South Africa	SABS	2003	1033	42	14	Standards Expert 2010 - Percy Malatsi; Attached Staff 2012 - Saziso (Sazi) Zangga
Swaziland	SWASA	2009	48	0	0	
Tanzania	TBS	2008	307	0	2	
Tunisia	INNORPI	2010	12	0	1	

# One Final Note



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## Business Annex to MoU (Commercial Agreement)

- Separate agreement that typically allows for sales of non-adopted ASTM standards and other publications, as well as defines their format
- May define terms for distributing adopted standards
- Terms are usually for a two year period
- Royalties due either quarterly or annually, depending on the agreement
- Not all ASTM MoU's include this Annex

# Conclusions

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- Regulations should use the best technical guidance regardless of the “brand” of standard
- MoU nations are authorized to use ASTM International standards (with appropriate permission and attribution) if they meet the needs of the end users
- Multiple paths exist to facilitate the use of ASTM information in your respective countries
- The use of high quality, universally accepted standards is a benefit to industry, regulators and patrons



ASTM INTERNATIONAL  
Helping our world work better

Thank you

[www.astm.org](http://www.astm.org)