# Nathalie,

Here are three items I would like to have considered when PS20 - 20 Revision 1 is reviewed.

# 1) Addition of one decimal place to Tables 1, 2, 3, and 4.

In the last review there was considerable discussion about the dimensions that are listed in tables 1, 2, 3, and 4. The question was asked which units are meant to be followed. After lengthy discussion the group decided that the last paragraph in Appendix B Section B1 of PS 20 was quite clear that in case of a dispute on size measurements, the conventional (inch) method of measurement shall take precedent. It occurs to me that the current tables kind of buries the lead in Appendix B. I would like the task group to discuss the inclusion of one decimal place in Tables 1, 2, 3, and 4 for the metric values in order to emphasize that dominance of the conventional (inch) measure. When foreign countries read the current standard they could easily be mislead into setting up a planer to 38 mm instead of the more correct setting of 38.1 mm and would be continuously producing lumber that is undersized. The proposed revisions to the Tables are shown in blue underlining. It would also make sense if the group agrees to this to consistently make this one decimal place for SI mm measurement the rule throughout the document.

## 2) Update references.

The references need to be updated to reflect the current versions of these standards.

# 3) Update the history of standard in Appendix D.

So this is not forgotten the history of the standard review must be updated in Appendix D.

# Table 1. Nominal and minimum-dressed dry sizes of finish, flooring, ceiling, partition, and stepping at 19 percent maximum-moisture content.

The thicknesses apply to all widths and all widths apply to all thicknesses except as modified. Sizes are given in millimeters and inches. Metric units are based on dressed size. See B1, Appendix B for rounding rule for metric units.

		Thicknesses		Widths			
Item	Nominal	Minimun	n Dressed	Nominal	Minimum Dressed		
	Inch	mm	inch	Inch	mm	inch	
	3/8	7.9	5/16	2	38.1	1 - 1/2	
	1/2	<u>11.1</u>	7/16	3	63.5	2 - 1/2	
	5/8	<u>14.3</u>	9/16	4	88.9	3-1/2	
	3/4	15.9	5/8	5	114.3	4 - 1/2	
	1	<u>19.1</u>	3/4	6	139.7	5 - 1/2	
	1-1/4	25.4	1	7	165.1	6-1/2	
Finish	1 - 1/2	<u>31.8</u>	1-1/4	8	184.2	7-1/4	
	1-3/4	<u>34.9</u>	1-3/8	9	209.6	8-1/4	
	2	38.1	1 - 1/2	10	235.0	9-1/4	
	2 - 1/2	50.8	2	11	260.4	10-1/4	
	3	63.5	2 - 1/2	12	285.8	11-1/4	
	3-1/2	<u>76.2</u>	3	14	337.4	13 - 1/4	
	4	88.9	3-1/2	16	387.4	15 - 1/4	
	3/8	7.9	5/16	2	28.6	1-1/8	
	1/2	<u>11.1</u>	7/16	3	54.0	2-1/8	
Flooring <sup>a</sup>	5/8	14.3	9/16	4	79.4	3-1/8	
Flooring "	1	<u>19.1</u>	3/4	5	104.8	4-1/8	
	1-1/4	25.4	1	6	130.2	5 - 1/8	
	1 - 1/2	<u>31.8</u>	1-1/4				
	3/8	7.9	5/16	3	54.0	2-1/8	
Ceiling <sup>a</sup>	1/2	<u>11.1</u>	7/16	4	79.4	3-1/8	
Cennig «	5/8	14.3	9/16	5	104.8	4-1/8	
	3/4	17.5	11/16	6	<u>130.2</u>	5 - 1/8	
				3	54.0	2-1/8	
Partition <sup>a</sup>	1	10.9	00/00	4	79.4	3-1/8	
Partition "	1	<u>18.3</u>	23/32	5	104.8	4-1/8	
				6	<u>130.2</u>	5-1/8	
Stepping	1	<u>19.1</u>	3/4	8	<u>184.2</u>	7-1/4	
-	1-1/4	25.4	1	10	235.0	9-1/4	
	1 - 1/2	31.8	1-1/4	12	285.8	11-1/4	
	2	<u>38.1</u>	1-1/2				

<sup>a</sup> In tongued-and-grooved flooring and in tongued-and-grooved and shiplapped ceiling of <u>7.9</u> mm (5/16 inch), 11 mm (7/16 inch), and <u>14.3</u> mm (9/16 inch) dressed thicknesses, the tongue or lap shall be <u>4.8</u> mm (3/16 inch) wide, with the over-all widths <u>4.8</u> mm (3/16 inch) wider than the face widths shown in the above table. In all other worked lumber shown in this table of dressed thicknesses of <u>15.9</u> mm (5/8 inch) to <u>31.8</u> mm (1-1/4 inches), the tongue shall be <u>6.4</u> mm (1/4 inch) wide or wider in tongued-and-grooved lumber, and the lap shall be <u>9.5</u> mm (3/8 inch) wide or wider in shiplapped lumber, and the over-all widths shall be not less than the dressed face widths shown in the above table plus the width of the tongue or lap.

#### Table 2. Nominal and minimum-dressed dry sizes of siding at 19 percent maximummoisture content.

The thicknesses apply to all widths and all widths apply to all thicknesses. Sizes are given in millimeters and inches. Metric units are based on dressed size. See B1, Appendix B for rounding rule for metric units.

		Thicknesses	Widths				
Item	Nominal		n Dressed	Nominal	Minimum Dressed		
	Inch	mm	inch	Inch	mm	inch	
Plain Bevel	1/2 9/16 5/8 3/4 1	<u>11.1</u> butt, <u>4.8</u> tip <u>11.9</u> butt, <u>4.8</u> tip <u>14.3</u> butt, <u>4.8</u> tip <u>17.5</u> butt, <u>4.8</u> tip <u>19.1</u> butt, <u>4.8</u> tip	7/16 butt, 3/16 tip 15/32 butt, 3/16 tip 9/16 butt, 3/16 tip 11/16 butt, 3/16 tip 3/4 butt, 3/16 tip	$     \begin{array}{c}       4 \\       5 \\       6 \\       8 \\       10 \\       12     \end{array} $	88.9 114.3 139.7 184.2 235.0 285.8	3-1/2 4-1/2 5-1/2 7-1/4 9-1/4 11-1/4	
Rabbeted Bevel	1/2 3/4	<u>11.1</u> butt, <u>4.8</u> tip <u>17.5</u> butt, <u>7.1</u> tip	7/16 butt, 3/16 tip 11/16 butt, 9/32 tip	4 6 8 10 12	88.9 139.7 184.2 235.0 285.8	3-1/2 5-1/2 7-1/4 9-1/4 11-1/4	
Bungalow	3/4	<u>17.5</u> butt, <u>4.8</u> tip	11/16 butt, 3/16 tip	6 8 10 12	139.7 184.2 235.0 285.8	5-1/2 7-1/4 9-1/4 11-1/4	
Shiplap (10 mm (3/8 in.) lap) <sup>b</sup>	5/8 1	14 18 ª	9/16 23/32 ª	4     5     6     8     10     12	76.2 101.6 127.0 171.5 222.3 273.1	3 4 5 6-3/4 8-3/4 10-3/4	
Shiplap (13 mm (1/2 in.) lap) <sup>b</sup>	5/8 1 2	<u>14.3</u> <u>18.3</u> ª <u>38.1</u>	9/16 23/32 ª 1-1/2	$     \begin{array}{c}       4 \\       5 \\       6 \\       8 \\       10 \\       12     \end{array} $	$73.0 \\98.4 \\123.8 \\168.3 \\219.1 \\269.9$	2-7/8 3-7/8 4-7/8 6-5/8 8-5/8 10-5/8	
Dressed and Matched (Tongue and Grooved, 6 mm (1/4 in.) tongue) <sup>b</sup>	5/8 1	<u>14.3</u> <u>18.3</u> ª	9/16 23/32 ª	$     \begin{array}{c}       4 \\       5 \\       6 \\       8 \\       10 \\       12     \end{array} $	$79.4 \\104.8 \\130.2 \\174.6 \\225.4 \\276.2$	3-1/8 4-1/8 5-1/8 6-7/8 8-7/8 10-7/8	
Dressed and Matched (Tongue and Grooved, 10 mm (3/8 in.) tongue) <sup>b</sup>	1	<u>18.3</u> a	23/32 ª	4 6 8 10 12	76.2 127.0 171.5 222.3 273.1	3 5 6-3/4 8-3/4 10-3/4	

<sup>a</sup> Minimum dressed thickness for 1-inch nominal redwood and western red cedar shiplap and tongue and groove siding patterns is 17.5 mm (11/16 inch).

<sup>b</sup> In siding lumber less than nominal 2-inch thickness, the tongue shall be <u>6.4</u> mm (1/4 inch) or <u>9.5</u> mm (3/8 inch) wide in tongued and grooved lumber and the lap shall be <u>9.5</u> mm (3/8 inch) or <u>12.7</u> mm (1/2 inch) wide in shiplapped lumber with the over-all widths <u>6.4</u> mm (1/4 inch), <u>9.5</u> mm (3/8 inch) and <u>12.7</u> mm (1/2 inch) wider, respectively, than the face widths shown in the above table.

#### Table 3. Nominal and minimum-dressed sizes of boards, dimension, and timbers.

The thicknesses apply to all widths and all widths apply to all thicknesses. Sizes are given in millimeters and inches. Metric units are based on dressed size. See B1, Appendix B for rounding rule for metric units.

		Th	icknesse	s		Widths					
Item	Nominal	Minimum Dressed				Nominal	Minimum Dressed				
Item	Inch	Dry <sup>a</sup>		Green <sup>a,b</sup>		Inch	Dry <sup>a</sup>		Green <sup>a,b</sup>		
		mm	inch	mm	Inch	men	mm	inch	mm	inch	
Boards	3/8 1/2 5/8 3/4 1 1-1/4 1-1/2	$\begin{array}{r} \underline{7.9} \\ \underline{11.1} \\ \underline{14.3} \\ \underline{15.9} \\ \underline{19.1} \\ \underline{25.4} \\ \underline{31.8} \end{array}$	5/16 7/16 9/16 5/8 3/4 1 1-1/4	$     \begin{array}{r} 8.7 \\     \underline{11.9} \\     \underline{15.1} \\     \underline{17.5} \\     \underline{19.8} \\     \underline{26.2} \\     \underline{32.5} \\     \end{array} $	11/32 15/32 19/32 11/16 25/32 1-1/32 1-9/32	$2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 14 \\ 16$	$\begin{array}{r} 38.1\\ 63.5\\ 88.9\\ 114.3\\ 139.7\\ 165.1\\ 184.2\\ 209.6\\ 235.0\\ 260.4\\ 285.8\\ 336.6\\ 387.4 \end{array}$	$\begin{array}{c} 1\text{-}1/2\\ 2\text{-}1/2\\ 3\text{-}1/2\\ 4\text{-}1/2\\ 5\text{-}1/2\\ 6\text{-}1/2\\ 7\text{-}1/4\\ 8\text{-}1/4\\ 9\text{-}1/4\\ 10\text{-}1/4\\ 10\text{-}1/4\\ 11\text{-}1/4\\ 13\text{-}1/4\\ 15\text{-}1/4\end{array}$	$\begin{array}{r} \underline{39.7}\\ \underline{65.1}\\ \underline{90.5}\\ \underline{117.5}\\ \underline{142.9}\\ \underline{168.3}\\ \underline{190.5}\\ \underline{215.9}\\ \underline{241.3}\\ \underline{266.7}\\ \underline{292.1}\\ \underline{342.9}\\ \underline{393.7} \end{array}$	$\begin{array}{c} 1-9/16\\ 2-9/16\\ 3-9/16\\ 4-5/8\\ 5-5/8\\ 6-5/8\\ 7-1/2\\ 8-1/2\\ 9-1/2\\ 10-1/2\\ 11-1/2\\ 13-1/2\\ 15-1/2\end{array}$	
Dimension	2 2-1/2 3 3-1/2 4 4-1/2	$     \frac{38.1}{50.8} \\     \underline{63.5} \\     \overline{76.2} \\     \underline{88.9} \\     \underline{101.6}   $	1-1/2 2 2-1/2 3 3-1/2 4	$     \frac{49.7}{52.4}     \underline{65.1}     \underline{77.8}     \underline{90.5}     \underline{103.2}   $	1-9/16 2-1/16 2-9/16 3-1/16 3-9/16 4-1/16	$ \begin{array}{r} 2\\ 2 \ 1/2\\ 3\\ 3 \ 1/2\\ 4\\ 4 \ 1/2\\ 5\\ 6\\ 8\\ 10\\ 12\\ 14\\ 16\\ \end{array} $	$\begin{array}{r} \underline{38.1}\\ \underline{50.8}\\ \underline{63.5}\\ 76.2\\ \underline{88.9}\\ \underline{101.6}\\ \underline{114.3}\\ \underline{139.7}\\ \underline{184.2}\\ \underline{235.0}\\ \underline{285.8}\\ \underline{336.6}\\ \underline{387.4} \end{array}$	$\begin{array}{c} 1.1/2\\ 2\\ 2.1/2\\ 3\\ 3.1/2\\ 4\\ 4.1/2\\ 5.1/2\\ 7.1/4\\ 9.1/4\\ 11.1/4\\ 13.1/4\\ 15.1/4\end{array}$	$\begin{array}{r} \underline{39.7}\\ \underline{52.4}\\ \underline{65.1}\\ 77.8\\ \underline{90.5}\\ \underline{103.2}\\ \underline{117.5}\\ \underline{142.9}\\ \underline{190.5}\\ \underline{241.3}\\ \underline{292.1}\\ \underline{342.9}\\ \underline{393.7} \end{array}$	$\begin{array}{c} 1.9/16\\ 2.1/16\\ 2.9/16\\ 3.1/16\\ 3.9/16\\ 4.1/16\\ 4.5/8\\ 5.5/8\\ 7.1/2\\ 9.1/2\\ 11.1/2\\ 13.1/2\\ 15.1/2\\ \end{array}$	
	5 & 6 thick	<u>12.7</u> off	1/2 off	<u>12.7</u> off	1/2 off	5 & 6 wide	<u>12.7</u> off	1/2 off	<u>12.7</u> off	1/2 off	
Timbers	7-15 thick	<u>19.1</u> off	3/4 off	<u>12.7</u> off	1/2 off	7-15 wide	<u>19.1</u> off	3/4 off	<u>12.7</u> off	1/2 off	
	>=16 thick	$\frac{25.4}{\text{off}}$	1 off	<u>12.7</u> off	1/2  off	>= 16 wide	$\frac{25.4}{\text{off}}$	1 off	<u>12.7</u> off	1/2 off	

<sup>a</sup> See 2.7 and 2.11 for the definitions of dry and green lumber.

<sup>b</sup> except for minimum dressed green sizes for Redwood, Western Red Cedar, and Northern White Cedar [see section 6.2.5].

#### Table 4. Nominal and minimum-dressed sizes of worked lumber.

The thicknesses apply to all widths and all widths apply to all thicknesses. Sizes are given in millimeters and inches. Metric units are based on dressed size. See B1, Appendix B for rounding rule for metric units.

		Tł	nickness	es		Widths				
Item	Naminal	Minimum Dressed				Nominal	Minimum Dressed			
	Nominal Inch	Dry <sup>a</sup>		Green <sup>a,b</sup>		Nominal Inch	Dry <sup>a</sup>		Green <sup>a,b</sup>	
		mm	inch	mm	inch	Inch	mm	inch	mm	inch
						4	<u>79.4</u>	3-1/8	<u>81.0</u>	3-3/16
						6	130.2	5 - 1/8	133.4	5 - 1/4
Shiplap,			$3/4^{d}$	<u>19.8</u>	25/32	8	174.6	6-7/8	<u>181.0</u>	7-1/8
10 mm (3/8 inch)	1	<u>19.1</u> <sup>d</sup>				10	225.4	8-7/8	<u>231.8</u>	9-1/8
$lap^{b}$						12	276.2	10-7/8	282.6	11-1/8
						14	327.0	12-7/8	<u>333.4</u>	13-1/8
						16	<u>377.8</u>	14-7/8	<u>384.2</u>	15-1/8
	1	<u>19.1</u> <sup>d</sup>	$3/4^{d}$	<u>19.8</u>	25/32	4	76.2	3	77.8	3-1/16
	2	<u>38.1</u>	1 - 1/2	39.7	1-9/16	6	127.0	<b>5</b>	130.2	5-1/8
Shiplap,	2 - 1/2	50.8	2	52.4	2 - 1/16	8	171.5	6-3/4	177.8	7
13 mm (1/2 inch)	3	<u>63.5</u>	2 - 1/2	65.1	2-9/16	10	<u>222.3</u>	8-3/4	228.6	9
lap <sup>c,d</sup>	3-1/2	<u>76.2</u>	3	<u>77.8</u>	3-1/16	12	273.1	10-3/4	$\underline{279.4}$	11
	4	<u>88.9</u>	3 - 1/2	90.5	3-9/16	14	<u>323.9</u>	12-3/4	330.2	13
	4-1/2	<u>101.6</u>	4	103.2	4-1/16	16	374.7	14-3/4	<u>381.0</u>	15
Centermatch						4	79.4	3-1/8	<u>81.0</u>	3-3/16
(Tongue &	1	19.1 <sup>d</sup>	$3/4^{e}$	19.8	25/32 1-1/32 1-9/32	5	<u>104.8</u>	4-1/8	<u>108.0</u>	4-1/4
Groove),	1-1/4	$\frac{15.1}{25.4}$	1	$\frac{15.8}{26.2}$		6	130.2	5 - 1/8	133.4	5-1/4
6 mm (1/4 inch)	1-1/4 1-1/2	$\frac{20.4}{31.8}$	1-1/4	$\frac{20.2}{32.5}$		8	174.6	6-7/8	<u>181.0</u>	7-1/8
tongue	1-1/2	<u>01.0</u>	1-1/4	02.0		10	225.4	8-7/8	231.8	9-1/8
toligue						12	276.2	10-7/8	<u>282.6</u>	11-1/8
Centermatch	2	<u>38.1</u>	1 - 1/2	39.7	1-9/16	4	<u>76.2</u>	3	77.8	3-1/16
(Tongue &	2 - 1/2	50.8	2	52.4	2 - 1/16	6	127.0	5	130.2	5-1/8
Groove),	3	<u>63.5</u>	2 - 1/2	65.1	2-9/16	8	171.5	6-3/4	177.8	7
10 mm (3/8 inch)	3 - 1/2	<u>76.2</u>	3	77.8	3-1/16	10	222.3	8-3/4	228.6	9
tongue <sup>d</sup>	4	<u>88.9</u>	3 - 1/2	90.5	3-9/16	12	273.1	10-3/4	279.4	11
tongue	4-1/2	<u>101.6</u>	4	103.2	4-1/16					
	2 - 1/2	50.8	2	52.4	2 - 1/16	4	88.9	3-1/2	90.5	3-9/16
Grooved-for-	3	<u>63.5</u>	2 - 1/2	65.1	2-9/16	6	139.7	5 - 1/2	142.9	5-5/8
Splines	3 - 1/2	<u>76.2</u>	3	77.8	3-1/16	8	184.2	7-1/4	190.5	7-1/2
Ohimeo	4	<u>88.9</u>	3 - 1/2	90.5	3-9/16	10	235.0	9-1/4	241.3	9-1/2
	4 - 1/2	<u>101.6</u>	4	103.2	4-1/16	12	285.8	11-1/4	292.1	11-1/2

<sup>a</sup> See 2.7 and 2.11 for the definitions of dry and green lumber.

<sup>b</sup> except for minimum dressed green sizes for Redwood, Western Red Cedar, and Northern White Cedar [see section 6.2.5].

<sup>c</sup> In worked lumber less than nominal 2-inch thickness, the tongue shall be <u>6.4</u> mm (1/4 inch) wide in tongued and grooved lumber and the lap shall be <u>9.5</u> mm (3/8 inch) or <u>12.7</u> mm (1/2 inch) wide in shiplapped lumber, with the over-all widths <u>6.4</u> mm (1/4 inch), <u>9.5</u> mm (3/8 inch) and <u>12.7</u> mm (1/2 inch) wider, respectively, than the face widths shown in the above table.

<sup>d</sup>In worked lumber of nominal 2-inch and greater thickness, the tongue shall be <u>9.5</u> mm (3/8 inch) wide in tongued-and-grooved lumber and the lap shall be <u>12.7</u> mm (1/2 inch) wide in shiplapped lumber, with the over-all widths <u>9.5</u> mm (3/8 inch) and <u>12.7</u> mm (1/2 inch) wider, respectively, than the face widths shown in the above table. Double tongued-and-grooved decking shall be manufactured with a <u>9.5</u> mm (3/8 inch) or <u>7.9</u> mm (5/16 inch) wide tongue.

e Alternate minimum dressed dry thickness for 1-inch nominal center-match and shiplap is 18.3 mm (23/32 inch).

## 12. REFERENCES <u>(need to be updated to</u> <u>current versions)</u>

#### 12.1 ASTM Standards<sup>1</sup>

- D9-12 Standard Terminology Relating to Wood and Wood Based Products
- D1165-18 Standard Nomenclature of Commercial Hardwoods and Softwoods
- D4444-18 Standard Test Methods for Laboratory Standardization and Calibration of Hand-Held Moisture Meters
- D7438-13 Standard Practice for Field Calibration and Application of Hand-Held Moisture Meters
- SI10-16 IEEE/ASTM SI 10 American National Standard for Use of the International System of Units (SI): The Modern Metric System

#### **12.2 Other publications**

Little, Elbert, Jr., *Checklist of United States Trees* (*Native and Naturalized*), Agriculture Handbook No. 541, Forest Service, U.S. Department of Agriculture, Washington DC 20090-6090, 1979.

<sup>&</sup>lt;sup>1</sup> ASTM Standards are available from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19248-2959; telephone (610) 832-9500; www.astm.org.

#### APPENDIX D IMPLEMENTATION AND MAINTENANCE OF STANDARD (Needs to be updated to reflect new review)

#### D1. STANDING COMMITTEE

The American Lumber Standard Committee (ALSC) acts as the Standing Committee for this Standard for the purpose of its interpretation and for considering future proposals for amendments and revisions. Members of the ALSC and their alternates are appointed by the Secretary of Commerce in accordance with Section 9 of this Standard. The names of the members are available from the Committee's secretariat: Standards Services Division, National Institute of Standards and Technology, Gaithersburg, Maryland 20899-2100. Comments regarding the Standard and suggestions for its amendment or revision may also be sent to this address. No product shall be advertised or represented in any manner that would imply approval or endorsement of that product by the National Institute of Standards and Technology and/or the Department of Commerce.

## D2. EFFECTIVE DATE

Voluntary Product Standard PS 20-20 Revision 1, American Softwood Lumber Standard, a voluntary standard developed under the Department of Commerce procedures, shall be effective October 2021 for products produced thereunder on and after that date. The Standard being superseded, American Softwood Lumber Standard PS 20-20, is effective for products produced thereunder through October, 2021.

# D3. HISTORY OF THE STANDARD

Early in 1922 Secretary of Commerce Herbert Hoover, responding to a request from the lumber industry, offered the cooperation of the Department in activities directed toward simplification, standardization, and development of adequate quality guarantees for the lumberconsuming public. This cooperation led to the development and publication in 1924 of Simplified Practice Recommendation R 16 under the guidance of the Department's Division of Simplified Practices, which was to become a part of the National Bureau of Standards (now the National Institute of Standards and Technology). The history of R 16's development and its subsequent revisions is summarized in editions issued, respectively, in 1924, 1925, 1926, 1929, 1939, and 1953.

R 16-53 was revised in 1969 and superseded by Voluntary Product Standard PS 20-70 American Softwood Lumber Standard. The significant provisions added to PS 20-70 were: 1) separate size standards for dry and green lumber, under nominal 5-inch thickness, were established in order to achieve greater uniformity in the dimensions of seasoned and unseasoned lumber at the point of use; 2) an independent National Grading Rule Committee was created to establish and maintain a national grading rule for dimension lumber conforming to PS 20; 3) an independent Board of Review was formed to assure uniform approval of grading rules and of agencies to grade under these rules, and to enhance enforcement of the accreditation program; 4) the composition of the American Lumber Standard Committee was expanded to reflect a broader representation of interests; and 5) uniform methods for assignment of design values were accepted. Non-substantive changes were made to the Standard in 1985, 1991, 1992, 1999, 2005, 2010, and 2015. The Standard was reviewed in 2019 to assure it reflected the needs of manufacturers, distributors and consumers.

## D4. CURRENT EDITION

The current edition, PS 20-20, has the same technical requirements and administrative structure for implementing and enforcing the Standard as its previous edition. This new edition was based on the recommendations resulting from an extensive technical and editorial review of PS 20-15 conducted by the Standing Committee with the assistance from the National Institute of Standards and Technology in 2019.