

# Public Review Draft

Proposed Addendum z to Standard 189.1-2017

# Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review Draft (August 2019)  
(Draft Shows Proposed Independent Substantive  
Changes to Previous Public Review Draft)

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## **Foreword**

In response to comments on the first public review of this addendum, modifications to the new Table 7.5.3 are proposed in this second PPR. These changes will make editorial revisions to some of the labeling in the table, but we are adding a new row to the “Fuels used directly in the building” portion of the table for “Other fuels not specified in this table” which uses the source energy factors for coal.

Note that similar changes are also being proposed for a second public review ISC for addendum aa on CO<sub>2</sub>e emissions factors.

*[Note to Reviewers: This addendum makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous public review draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

## **Addendum z to 189.1-2017**

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*Modify new Table 7.5.3 Source Energy Conversion Factors as shown below*

**TABLE 7.5.3 Source Energy Conversion Factors**

Energy Form	Source Energy Conversion Factor
<b>Fossil Fuels Used Directly in Building</b>	
Natural gas	1.09
LPG or propane	1.15
Fuel oil (residual)	1.19
Fuel oil (distillate)	1.19
Coal	1.05
Gasoline	1.19
<u>Other fuels not specified in this table</u>	<u>1.05</u>
<b>Imported Electricity and Exported Renewable Electricity</b>	
AKGD - ASCC Alaska Grid	2.52
AKMS - ASCC Miscellaneous	1.21
AZNM - WECC Southwest	2.75
CAMX - WECC California	1.94
ERCT - ERCOT All	2.58
FRCC - FRCC All	2.97
HIMS - HICC Miscellaneous	2.86
HIOA - HICC Oahu	3.83
MROE - MRO East	3.08
MROW - MRO West	2.50
NEWE - NPCC New England	2.87
NWPP - WECC Northwest	1.39
NYCW - NPCC NYC/Westchester	2.92
NYLI - NPCC Long Island	2.90
NYUP - NPCC Upstate NY	1.97
RFCE - RFC East	3.05
RFCM - RFC Michigan	3.06
RFCW - RFC West	3.14
RMPA - WECC Rockies	2.33
SPNO - SPP North	2.67
SPSO - SPP South	2.46
SRMV - SERC Mississippi Valley	2.95
SRMW - SERC Midwest	3.20
SRSO - SERC South	3.04
SRTV - SERC Tennessee Valley	3.02
SRVC - SERC Virginia/Carolina	3.11
<u>All other electricity and other fuels not specified in this table</u>	<u>2.64</u>
<b>District Thermal Energy</b>	
Chilled water	0.63
Steam	1.83
Hot water	1.73

*Informative Note:* Values in this table represent averages for the United States and include both direct and indirect emissions.