

ADDENDA

**ANSI/ASHRAE/ASHE Addendum n to
ANSI/ASHRAE/ASHE Standard 189.3-2021**

Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on January 31, 2025, and by the American Society for Healthcare Engineering on January 6, 2025.

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Supporting TC: 2.8, Building Environmental Impacts and Sustainability

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FOREWORD

The 2023 version of ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1 removed the alternate renewables approach for compliance and kept the standard renewables approach. Based on this change, Addendum n to Standard 189.3 removes the alternate approach columns from Table 7.4.1.1, “Renewable Energy Requirements.”

The 2023 version of Standard 189.1 also updated Section 7.6 (previously Section 7.5) and Table 7.6.1 (previously Table 7.5.1) and added new Tables 7.6.2 and 7.6.2.2.1 to provide consistent stringency with prescriptive energy requirements in Sections 7.1 through 7.4, which reference ANSI/ASHRAE/IES Standard 90.1. To be consistent with these changes, Addendum n rennumbers Table 7.5.1 to Table 7.6.1 and updates the table format. This addendum also adds Tables 7.6.2 and 7.6.2.2.1.

The “Hospital” and “Specialized Outpatient Facility” category values match the “Hospital” values listed in Standard 189.1-2023. The “Residential Health Facility” values align with the “Multifamily” values listed in Standard 189.1-2023. The “General Outpatient Facility” values match the “Office” values listed in Standard 189.1-2023.

Informative Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum n to Standard 189.3-2021

Modify Table 7.4.1.1 as shown.

Table 7.4.1.1 Renewable Energy Requirement

Building Type	Standard Renewables Approach		Alternate Renewables Approach	
	kBtu/ft ² ·year	kW/m ² ·year	kBtu/ft²·year	kW/m²·year
Hospital	40	126	36	113
Residential health facility ^a	22	68	20	62
Specialized outpatient facility	38	120	34	107
General outpatient facility	14	44	13	40

a. [189.3] Exception: Applicable for new construction only.

Modify Section 7.5.1 as shown. Note that Standard 189.1-2023 updated section 7.5 to 7.6. These changes are reflected in this addendum where applicable.

~~7.5.1~~ 7.6.1 Annual Energy Cost

- a. Follow Standard 189.1 Section ~~7.5.1~~ 7.6.1, “Annual Energy Cost,” except that building performance factor (BPF) shall be taken from Table ~~7.5.1~~ 7.6.1 of this standard.

Modify section 7.5.2 as shown.

~~7.5.2~~ 7.6.2 Zero Annual Carbon Dioxide Equivalent (CO₂e) Emission Factor (zCEF). Follow Standard 189.1 Section ~~7.5.2~~ 7.6.2, “~~Zero Annual Carbon Dioxide Equivalent (CO₂e) Emission Factor (zCEF),~~” except that PCI target shall be determined in accordance with Standard 189.3 Section ~~7.5.1~~ 7.6.1, “Annual Energy Cost.”

Replace Table 7.5.1 with new Table 7.6.1 as shown. The old Table 7.5.1 is not shown here for brevity.

Table 7.6.1 Building Performance Factors for Cost (BPFc) and Renewable Fraction (RFc)

	<u>Climate Zone</u>	<u>Building Type</u>			
		<u>Hospital</u>	<u>Residential Health Facility</u>	<u>Specialized Outpatient Facility</u>	<u>General Outpatient Facility</u>
<u>Building Performance Factor for Cost</u>	<u>0A</u>	<u>0.62</u>	<u>0.69</u>	<u>0.62</u>	<u>0.51</u>
	<u>0B</u>	<u>0.60</u>	<u>0.68</u>	<u>0.60</u>	<u>0.52</u>
	<u>1A</u>	<u>0.63</u>	<u>0.72</u>	<u>0.63</u>	<u>0.50</u>
	<u>1B</u>	<u>0.60</u>	<u>0.69</u>	<u>0.60</u>	<u>0.51</u>
	<u>2A</u>	<u>0.60</u>	<u>0.73</u>	<u>0.60</u>	<u>0.46</u>
	<u>2B</u>	<u>0.56</u>	<u>0.73</u>	<u>0.56</u>	<u>0.47</u>
	<u>3A</u>	<u>0.57</u>	<u>0.74</u>	<u>0.57</u>	<u>0.45</u>
	<u>3B</u>	<u>0.57</u>	<u>0.76</u>	<u>0.57</u>	<u>0.48</u>
	<u>3C</u>	<u>0.54</u>	<u>0.68</u>	<u>0.54</u>	<u>0.40</u>
	<u>4A</u>	<u>0.58</u>	<u>0.74</u>	<u>0.58</u>	<u>0.45</u>
	<u>4B</u>	<u>0.56</u>	<u>0.75</u>	<u>0.56</u>	<u>0.46</u>
	<u>4C</u>	<u>0.53</u>	<u>0.74</u>	<u>0.53</u>	<u>0.43</u>
	<u>5A</u>	<u>0.57</u>	<u>0.73</u>	<u>0.57</u>	<u>0.48</u>
	<u>5B</u>	<u>0.54</u>	<u>0.76</u>	<u>0.54</u>	<u>0.48</u>
	<u>5C</u>	<u>0.55</u>	<u>0.75</u>	<u>0.55</u>	<u>0.46</u>
	<u>6A</u>	<u>0.58</u>	<u>0.72</u>	<u>0.58</u>	<u>0.49</u>
	<u>6B</u>	<u>0.57</u>	<u>0.73</u>	<u>0.57</u>	<u>0.49</u>
	<u>7</u>	<u>0.59</u>	<u>0.71</u>	<u>0.59</u>	<u>0.48</u>
<u>8</u>	<u>0.60</u>	<u>0.73</u>	<u>0.60</u>	<u>0.52</u>	
<u>Renewable Fraction</u>		<u>0.35</u>	<u>0.50</u>	<u>0.35</u>	<u>0.50</u>

Add new Table 7.6.2 as shown.

Table 7.6.2 Building Performance Factors for Emissions (BPFe) and Renewable Fraction (RFe)

	<u>Climate Zone</u>	<u>Building Type</u>			
		<u>Hospital</u>	<u>Residential Health Facility</u>	<u>Specialized Outpatient Facility</u>	<u>General Outpatient Facility</u>
Building Performance Factor for Greenhouse Gas Emissions	<u>0A</u>	<u>0.63</u>	<u>0.68</u>	<u>0.63</u>	<u>0.51</u>
	<u>0B</u>	<u>0.61</u>	<u>0.67</u>	<u>0.61</u>	<u>0.53</u>
	<u>1A</u>	<u>0.63</u>	<u>0.71</u>	<u>0.63</u>	<u>0.51</u>
	<u>1B</u>	<u>0.60</u>	<u>0.69</u>	<u>0.60</u>	<u>0.51</u>
	<u>2A</u>	<u>0.60</u>	<u>0.71</u>	<u>0.60</u>	<u>0.46</u>
	<u>2B</u>	<u>0.57</u>	<u>0.71</u>	<u>0.57</u>	<u>0.48</u>
	<u>3A</u>	<u>0.48</u>	<u>0.74</u>	<u>0.48</u>	<u>0.46</u>
	<u>3B</u>	<u>0.47</u>	<u>0.72</u>	<u>0.47</u>	<u>0.48</u>
	<u>3C</u>	<u>0.56</u>	<u>0.66</u>	<u>0.56</u>	<u>0.41</u>
	<u>4A</u>	<u>0.59</u>	<u>0.68</u>	<u>0.59</u>	<u>0.43</u>
	<u>4B</u>	<u>0.57</u>	<u>0.70</u>	<u>0.57</u>	<u>0.46</u>
	<u>4C</u>	<u>0.55</u>	<u>0.67</u>	<u>0.55</u>	<u>0.43</u>
	<u>5A</u>	<u>0.58</u>	<u>0.65</u>	<u>0.58</u>	<u>0.46</u>
	<u>5B</u>	<u>0.56</u>	<u>0.68</u>	<u>0.56</u>	<u>0.48</u>
	<u>5C</u>	<u>0.58</u>	<u>0.67</u>	<u>0.58</u>	<u>0.47</u>
	<u>6A</u>	<u>0.60</u>	<u>0.64</u>	<u>0.60</u>	<u>0.47</u>
	<u>6B</u>	<u>0.60</u>	<u>0.65</u>	<u>0.60</u>	<u>0.49</u>
	<u>7</u>	<u>0.61</u>	<u>0.62</u>	<u>0.61</u>	<u>0.46</u>
<u>8</u>	<u>0.63</u>	<u>0.64</u>	<u>0.63</u>	<u>0.49</u>	
Renewable Fraction	<u>0.35</u>	<u>0.50</u>	<u>0.35</u>	<u>0.50</u>	

Add new Table 7.6.2.2.1 as shown.

Table 7.6.2.2.1 Building Performance Factors for Emissions (BPFE) and Renewable Fraction (RFE) for Use with LRMER

	Climate Zone	Building Type			
		Hospital	Residential Health Facility	Specialized Outpatient Facility	General Outpatient Facility
Building Performance Factor for Greenhouse Gas Emissions	<u>0A</u>	<u>0.63</u>	<u>0.70</u>	<u>0.63</u>	<u>0.51</u>
	<u>0B</u>	<u>0.63</u>	<u>0.70</u>	<u>0.63</u>	<u>0.51</u>
	<u>1A</u>	<u>0.63</u>	<u>0.70</u>	<u>0.63</u>	<u>0.51</u>
	<u>1B</u>	<u>0.63</u>	<u>0.70</u>	<u>0.63</u>	<u>0.51</u>
	<u>2A</u>	<u>0.60</u>	<u>0.70</u>	<u>0.60</u>	<u>0.47</u>
	<u>2B</u>	<u>0.59</u>	<u>0.68</u>	<u>0.59</u>	<u>0.49</u>
	<u>3A</u>	<u>0.58</u>	<u>0.72</u>	<u>0.58</u>	<u>0.47</u>
	<u>3B</u>	<u>0.60</u>	<u>0.64</u>	<u>0.60</u>	<u>0.49</u>
	<u>3C</u>	<u>0.63</u>	<u>0.57</u>	<u>0.63</u>	<u>0.44</u>
	<u>4A</u>	<u>0.58</u>	<u>0.63</u>	<u>0.58</u>	<u>0.43</u>
	<u>4B</u>	<u>0.59</u>	<u>0.59</u>	<u>0.59</u>	<u>0.47</u>
	<u>4C</u>	<u>0.60</u>	<u>0.51</u>	<u>0.60</u>	<u>0.43</u>
	<u>5A</u>	<u>0.59</u>	<u>0.60</u>	<u>0.59</u>	<u>0.45</u>
	<u>5B</u>	<u>0.59</u>	<u>0.54</u>	<u>0.59</u>	<u>0.47</u>
	<u>5C</u>	<u>0.68</u>	<u>0.49</u>	<u>0.68</u>	<u>0.49</u>
	<u>6A</u>	<u>0.61</u>	<u>0.57</u>	<u>0.61</u>	<u>0.46</u>
<u>6B</u>	<u>0.65</u>	<u>0.52</u>	<u>0.65</u>	<u>0.47</u>	
<u>7</u>	<u>0.64</u>	<u>0.53</u>	<u>0.64</u>	<u>0.43</u>	
<u>8</u>	<u>0.63</u>	<u>0.62</u>	<u>0.63</u>	<u>0.49</u>	
Renewable Fraction	<u>0.35</u>	<u>0.50</u>	<u>0.35</u>	<u>0.50</u>	

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ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

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The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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