LEED v4 Building Design and Construction

**ANSWERS**

Quiz #7

MR

1. Which of these is a preferred strategy for reducing waste? [Chose four]
2. Source reduction
3. Composting
4. Reuse
5. Recycling
6. Waste to energy
7. Incinerators
8. Which of these is an innovative construction strategy that could contribute to source reduction? [Choose two]
9. Prefabrication
10. Cabinets made of wheat husks sourced from all over the country and bound together in resin
11. Designing to dimensional construction materials
12. Solid wood cabinets made from local timber
13. Which of these statements best describes Life Cycle Assessment (LCA)?
14. An analysis that identifies which high-performance building systems will save money over the life of a project, despite their higher initial cost.
15. An analysis of the environmental aspects and potential impacts associated with a product, process, or service.
16. An analysis that identifies which high-performance building systems will have lower first costs.
17. An analysis that helps designers have informed selection of products to achieve lower GHG emissions and reduced environmental impact.
18. Which of these materials must be included in the Materials and Resources (MR) credit category? [Choose three]
19. Casework
20. Furniture
21. Metal studs
22. Elevators
23. Doors
24. Formwork
25. Which of these are methods used for determining credit achievement in the Materials and Resource (MR) category? [Choose two]
26. Product cost
27. Number of qualifying products
28. Weight
29. Volume
30. Which of these must be treated as separate products for the Materials and Resources (MR) credit category? [Choose two]
31. Paints of different gloss
32. Carpet of different color
33. Carpet of different pile height
34. Paints of different color
35. Which of these is excluded for the total product cost for the Materials and Resources (MR) credit category? [Choose two]
36. Taxes
37. Delivering fees
38. Labor to install material
39. Equipment cost to install material
40. To use the default materials cost for Materials and Resources (MR) credits which of these would a project use?
41. 45% of total construction costs, excluding labor
42. 45% of total construction costs
43. 45% of total construction costs, excluding labor but including delivery and taxes
44. 45% of total material and equipment costs
45. For a product to qualify for the location valuation factor in Materials and Resources (MR) credits which of these must be satisfied?
46. Product must be extracted, manufactured, and purchased within 100 miles of the project
47. Product must be extracted, manufactured, and purchased within 500 miles of the project
48. Product must be purchased within 100 miles of the project
49. Product must be salvaged within 100 miles of the project
50. What is the location valuation factor of a product that meets the location valuation requirements?
51. 1
52. 2
53. 3
54. 4
55. What is the contributing value of a material that is part of an assembly based on?
56. Location purchased
57. Component value
58. Product value
59. Weight
60. Percentage of component meeting sustainability criteria
61. To satisfy the requirements for MR Prerequisite Storage and Collection of Recyclables what materials must projects collect? [Choose four]
62. Tuna fish can
63. Ink cartridge
64. Wrapping paper
65. Uneaten portion of a burrito
66. Batteries
67. e-waste
68. Ice-tea bottle
69. Which of these LEED BD+C projects must conduct a waste stream audit to meet the requirements for MR Prerequisite Storage and Collection of Recyclables?
70. LEED BD+C: Schools
71. LEED BD+C: Hospitality
72. LEED BD+C: Retail
73. LEED BD+C: Healthcare
74. Which of these waste types is considered as part of a hazardous waste stream? [Choose two]
75. Printers
76. Fluorescent lamps
77. Broken glass lamp shade
78. Printer ink cartridge
79. Copier toner cartridge
80. Which of these does not contribute to MR Credit Construction and Demolition Waste management Planning? [Choose three]
81. Scrap metal
82. Soil
83. Rock found on-site
84. Concrete
85. Drywall
86. Tree stumps
87. How can project teams keep track of the quantity of diverted material to meet the requirements for MR Credit Construction and Demolition Waste Management?
88. Weight
89. Cost
90. Volume
91. Weight or volume but must be consistent
92. Which of these is recommended for projects that have limited storage area for waste containers?
93. Source separation
94. Donating surplus to charitable organizations
95. Single-stream recycling
96. Waste-to-energy
97. For MR Prerequisite PBT Source Reduction—Mercury which of these must be included in the prerequisite scope for projects planning to reuse existing mercury-containing equipment and lamps? [Choose two]
98. MRI equipment
99. Thermostats
100. Lamps
101. Thermometers
102. Mercury-containing waste to be addressed in coordination with MR Prerequisite Storage and Collection of Recyclables includes which of the following equipment? [Choose three]
103. HID lamps
104. MRI equipment
105. CFL
106. Dental waste
107. What is the elemental symbol for mercury?
108. Lm
109. K
110. mg
111. Hg
112. HID
113. Projects earning MR Credit Building Life-Cycle Impact Reduction by following Option 3. Building and Material Reuse must exclude which of these for the calculation? [Choose two]
114. Hazardous materials
115. Carpet
116. Acoustic ceiling tiles
117. Windows
118. Projects earning MR Credit Building Life-Cycle Impact Reduction by following Option 4. Whole-Building Life-Cycle Assessment must achieve which of these to earn the credit?
119. Demonstrate a minimum of 10% reduction, compared with a baseline building, in at least three of the six impact categories
120. Demonstrate at least a 10% reduction in global warming potential and a 10% reduction of two of five other impact categories
121. Demonstrate a minimum of 10% reduction, compared with a baseline building, in all six impact categories
122. Demonstrate a minimum of 10% reduction, compared with a baseline building, in global warming potential (greenhouse gases), in CO2e
123. Demonstrate a minimum of 5% reduction, compared with a baseline building, in at least three of the six impact categories
124. Which of these are the most common, measurable, and well-understood environmental impacts that LCA tools evaluate? [Choose three]
125. Human health
126. Eutrophication
127. Ozone depletion
128. Land-use issues
129. Global warming potential
130. Identify the options for MR Credit Building Life-Cycle Impact Reduction. [Choose four]
131. Building and Material Reuse
132. Reuse Brownfield Site
133. Reuse Historic Building
134. Renovation of Abandoned or Blighted Building
135. Whole-Building Life-Cycle Assessment
136. Which of these are excluded in the calculation for MR Credit Building Life-Cycle Impact Reduction, Option 4. Whole-Building Life-Cycle Assessment? [Choose two]
137. Parking structures
138. Plumbing fixtures
139. Parking lots
140. HVAC equipment
141. When calculating surface area for vertical building elements which of these are considered as part of the layers? [Choose two]
142. Floor finish
143. Enclosure
144. Interior finish
145. Ceiling finish
146. Which of these can be used to earn MR Credit Building Product Disclosure and Optimization— Environmental Product Declarations? [Choose two]
147. Use at least 10 different permanently installed products sourced from at least five different manufacturers that meet one of the disclosure criteria specified by the requirements
148. Use at least 20 different permanently installed products sourced from at least five different manufacturers that meet one of the disclosure criteria specified by the requirements
149. Use products that comply with the specified credit criteria for 50%, by cost, of the total value of permanently installed products in the project.
150. Use products that comply with the specified credit criteria for 30%, by cost, of the total value of permanently installed products in the project.
151. Environmental Product Declarations (EPDs) must met what standard?
152. ASHRAE
153. Green-e climate
154. International Organization for Standardization (ISO)
155. Green-e energy
156. For MR Credit Building Product Disclosure and Optimization— Environmental Product Declarations achievement products having a cradle to gate scope that meets Product-Specific Type III EPD can be valued as which of these?
157. One quarter (1/4) of a product
158. One half (1/2) of a product
159. One whole product
160. Products do not qualify for the credit
161. How can a project earn exemplary performance for MR Credit Building Product Disclosure and Optimization— Environmental Product Declarations? [Choose two]
162. Purchase 75%, by cost, of permanently installed building products that meet the required attributes.
163. Purchase 50%, by cost, of permanently installed building products that meet the required attributes.
164. Source at least 40 qualifying products from five manufacturers.
165. Source at least 40 qualifying products from ten manufacturers.
166. How can a project earn MR Credit Building Product Disclosure and Optimization—Sourcing of Raw Materials?
167. Use products that meet at least one of the responsible extraction criteria attributes for at least 15%, by cost, of the total value of permanently installed building products in the project.
168. Use products that meet at least one of the responsible extraction criteria attributes for at least 15%, by cost, of the total value of all installed building products in the project.
169. Use products that meet at least one of the responsible extraction criteria attributes for at least 25%, by cost, of the total value of all installed building products in the project.
170. Use products that meet at least one of the responsible extraction criteria attributes for at least 25%, by cost, of the total value of permanently installed building products in the project.
171. For MR Credit Building Product Disclosure and Optimization—Sourcing of Raw Materials for all wood products that contribute to credit achievement who must have the COC certificate that is current at the time of sale?
172. Contractor
173. Manufacturer
174. Supplier
175. Vendor
176. What is the default recycled content for steel products when no recycled content information is available?
177. 25% preconsumer
178. 25% postconsumer
179. 90% preconsuemr
180. 90% postconsumer
181. For MR Credit Building Product Disclosure and Optimization—Sourcing of Raw Material a project team purchased 50 doors salvaged from a local deconstruction site and sold through a local Habitat for Humanity ReStore for $500. The value of equivalent new doors is documented at $400 each. What is the total sustainable criteria value for these doors?
182. $25,000
183. $50,000
184. $20,000
185. $40,000
186. Which of these programs would help a project to earn MR Credit Building Product Disclosure and Optimization—Material Ingredients, Option 1. Material Ingredient Reporting? [Choose three]
187. Cradle to Gate
188. Cradle to Cradle
189. Health Product Declaration
190. GreenScreen v1.2 Benchmark
191. Manufacturer Inventory
192. For MR Credit Building Product Disclosure and Optimization—Material Ingredients, Option 2. Material Ingredient Optimization if all ingredients have undergone a full GreenScreen Assessment what value for the product can projects use?
193. 25% of cost
194. 50% of cost
195. 100% of cost
196. 150% of cost
197. 200% of cost
198. MR Credit PBT Source Reduction—Mercury applies to which type of project?
199. LEED BD+C: Schools
200. LEED BD+C: Healthcare
201. LEED BD+C: Retail
202. LEED BD+C: New Construction
203. Which of these lamps should projects not specify in order to earn Credit PBT Source Reduction—Mercury? [Choose two]
204. T-8 fluorescent, U-bent
205. Circular fluorescent
206. High-pressure sodium
207. Probe start metal halide
208. For MR Credit PBT Source Reduction— Lead, Cadmium, and Copper what standard must all solder joints comply with?
209. ASHRAE
210. ISO
211. ASTM
212. GreenSeal
213. California
214. Which of these are not permitted as additives to paint for MR Credit PBT Source Reduction— Lead, Cadmium, and Copper? [Choose two]
215. Lead
216. Chromium
217. Mercury
218. Cadmium
219. Urea formaldehyde
220. In order for healthcare projects to comply with MR Credit Furniture and Medical Furnishings what standard must all new furniture or medical furnishing assemblies meet?
221. BIFMA
222. ASHRAE
223. ISO
224. ASTM
225. For Materials and Resources (MR) credits how are preconsumer recycled materials valued?
226. 0.25, by cost
227. 0.5, by cost
228. 0.25, by weight
229. 0.5, by weight
230. Which of these strategies could help a project to earn MR Credit Design for Flexibility? [Choose two]
231. Interior partition walls
232. Movable casework
233. Curtains instead of wall partitions
234. Demountable partitions
235. How can projects earn an exemplary performance point for MR Credit Construction and Demolition Waste Management?
236. Divert 100% and Three Material Streams
237. Divert 50% and Three Material Streams or Divert 75% and Four Material Streams and do not generate more than 2.5 pounds of construction waste per square foot of the building’s floor area.
238. Divert 75% and eight Material Streams
239. Do not generate more than 5.0 pounds of construction waste per square foot of the building’s floor area.
240. Which of these types of material do not count as diversion, but must be included in total construction and demolition waste?
241. ADC
242. Reused
243. Salvaged
244. Donated