

2021 IBC Section	Change from Current	Issues Addressed	Benefits of Updating	Increased or Decreased Regulation	Fiscal Impact	Health and Safety Concerns Addressed
423.4	Increased guidance regarding design, location and capacity of storm shelters	Guidance for design and placement of storm shelters ambiguous in previous codes	Clarifies design and placement of storm shelter	Same	Increased cost due to additional requirements to construct storm shelters.	Increased safety by providing clear guidance on the design, occupant load and placement of storm shelters including increased access to storm shelters
1603.1	Added requirement that roof slope factor, machinery and rain intensity loads be shown on construction documents	Determination of roof slope factor for a project previously required a review of the calculations.	Simplifies review by clearly stating design factors	Same	None	Simplifies review increasing likelihood a design error will be identified and corrected thereby increasing public safety.
1603.1.3	Added requirement that drift load and width be shown on construction documents	Determination of drift loads for a project previously required a review of the calculations.	Simplifies review by clearly stating design loads	Same	None	Simplifies review increasing likelihood a design error will be identified and corrected thereby increasing public safety.
1603.1.8.1	Solar panel loads shown on construction documents	Determination of solar panel loads for a project previously required a review of the calculations.	Simplifies review by clearly stating design loads	Same	None	Simplifies review increasing likelihood a design error will be identified and corrected thereby increasing public safety.
Table 1604.3	Additional information provided for deflection limits of glue lam wood members in Note D	Clarifies deflection limit	Reduced likelihood of damage to interior finishes and supported elements by defining deflection limits	Same	None	None
Table 1604.5	Clarification to Risk Category III occupancies	Clarifies previously ambiguous risk category determination	Clear guidance when determining risk category	Same	None	Increased safety by providing clear guidance on risk category determination
1607.12.1.2	Clarifies live load reduction for live loads in excess of 100 psf	Previous code provisions were unclear	Previous guidance was unclear likely resulting in overly conservative designs	Same	Reduced cost due to fewer structures designed with overly conservative live loads	None
1609	References ASCE 7-16	Updates out-of-date standard	Reduces basic wind speed for risk category II from 115 mph to 107 mph resulting in more economical structures	Same	Reduced cost due to lower loads for risk category II structures	None
1604.10	Loads for storm shelters added to be in accordance with ICC 500	Addresses conflicting loading for storm shelters	Eliminates conflicting design loads clarifying design	Same	None	Increased safety by providing clear guidance on storm shelter loads and eliminating conflicting information
1606.4	Added clarification that solar panels are considered dead load	Clarifies previously ambiguous loading categorization	Clear design load provisions for easier design	Same	Reduced cost. Reduced demands due to lower load factor results in lower construction costs.	N/A
1606.5	Added clarification that vegetative roofs are dead loads	Clarifies previously ambiguous loading categorization	Clear design load provisions for easier design	Same	Reduced cost. Reduced demands due to lower load factor results in lower construction costs.	N/A
Table 1607.1	Additional occupancies added for live loads for clarification	Defines loads for previously undefined occupancies	Clear guidance when determining loads	Same	None	Increased safety by providing clear guidance on live loads
Table 1607.1	Increased live loads for balconies. Increased to 1.5 * live load for area served, not required to exceed 100 psf	Multiple balcony failures occurred due to insufficient load capacity	Increased public safety	Same	Increased cost due to additional support framing.	Increased public safety due to greater load capacity for balconies which have experienced numerous failures leading to injury and loss of life.
1607.7	Passenger vehicle garage loads added clarifying loads for these structures	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	Reduced cost. Reduced demands due to larger contact area and reduced pressure from wheel concentrated loads.	Increased public safety due to greater clarity regarding loads to be used in design.
1607.11.3	Loads added for elements supporting hoists and facade access equipment	Defines loads for previously undefined elements	Clear guidance when determining loads	Same	None	Increased safety by providing clear guidance on loading for critical elements
1607.11.4	Loads added for lifeline anchorages for facade access equipment	Defines loads for previously undefined elements	Clear guidance when determining loads	Same	None	Increased safety by providing clear guidance on loading for critical elements
1607.14.2.2	Additional information provided for design loads of vegetative roofs	Defines loads for previously undefined situations	Clear guidance when determining loads	Same	None	Increased safety by providing clear guidance on loading
1607.14.4	Clarification for roof live loads with solar panels	Clarifies previously ambiguous loading	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1607.16.2	Fire walls required to resist 5 psf lateral load	Loads for fire walls previously undefined	Clear design load provisions for easier design	Same	Increased cost due to additional support framing.	Increased safety to public and first responders by increasing structural stability of a building when structure on either side of a fire wall has collapsed.
1607.17	Loads added for fixed ladders	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1607.19	Loads added for assembly seating	Provides clear guidance for loads to be used in design and is consistent with ICC 300 for the design of bleachers.	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1607.20	Loads added for sidewalks, yards subject to trucking	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1607.21	Loads added for stair treads	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1607.22	Loads added for residential attics	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
1610.2	Hydrostatic uplift loads added for floors and foundations	Provides clear guidance for loads to be used in design	Clear design load provisions for easier design	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.

Chapter 17	Indiana Building Code 2014 states: Sec. 19. Chapter 17 is amended as follows: Amend Chapter 17, Special Inspections and tests, by deleting the text and inserting to read as follows: See the General Administrative Rules (675 IAC 12-6-6(c)(10)(C) and Industrial Building Systems (675 IAC 15).(Fire Prevention and Building Safety Commission; 675 IAC 13-2.6-19; filed Aug 1, 2014, 11:12 a.m.:20140827-IR-675130339FRA, eff Dec 1, 2014). By keeping Chapter 17 in the new code, Indiana will fall in line the vast majority of all other states.	With Chapter 17 removed, it falls on the engineer to request special inspection in the construction documents. As a result, special inspections rarely occur, because the contractor and owner do not want to pay for it. Without special inspections the risk of construction errors increases.	Increased probability that construction will comply with intended design and intended construction. Increased public safety by reducing mistakes, errors and oversights during construction.	Increased	Modest increase in overall building cost: a. Example of added project cost for a 200,000 s.f., three-story office building: i. Full-time inspection: 40 hours x 8 weeks = 320 hours. ii. Assumed inspection cost = \$150/hr. iii. Inspection cost = 320 hours x \$150/hr = \$48,000. iv. Assume total building cost = 200,000 sf x \$250/sf = \$50,000,000. v. Inspection cost = \$48,000/\$50,000,000 = 0.10% of total cost. b. As illustrated in the above example, the inspection cost is extremely low relative to the building cost.	Increased public safety by reducing construction errors
1901.2	References updated concrete standard, ACI 318-19	Adds chapter for design of diaphragm and collector elements in low seismic zone	Allows for proper design of these critical elements.	Same	None	Increased public safety due to greater clarity regarding loads to be used in design.
2101.2	References updated masonry standard, TMS 402-16	Adds requirements for shear friction capacity of masonry shear walls	Allows for proper design of these critical elements.	Increased	Possible increased cost if walls were not previously designed for shear friction	Increased public safety due to requirement that shear friction be included in design of masonry walls
2101.2	References updated masonry standard, TMS 402-16	Accommodates increased insulation thickness	Greater energy efficiency	Same	Decreased cost due to potential for greater energy efficiency	None
2107.2.1	Adds maximum limit for rebar lap splices of 72 bar diameter	Previous lap length requirements were overly conservative	More economical design	Same	Reduced cost by allowing for more economical design	None
2205	References updated steel standard, AISC 360-16	Previous versions of AISC 360 were more restrictive in design and updated code allows for greater design flexibility	Allows for more options in design and more accurate analysis resulting in more economical structures	Same	Reduced cost by allowing for increased design option	None
2208	References updated steel standard, ASCE19-16	Provides for provisions for small diameter cables	Smaller cables results in lower construction costs due to less material and supporting structure	Same	Reduced cost by allowing for more economical design	None
2210	References updated steel standard, AISI S100	Previous version of AISI limited use of strength design.	Uses latest design methods for more accurate analysis	Same	Reduced cost by allowing for more economical designs	None
2210	References updated steel standard, AISI S100	Increase in factor of safety required for connections, for both LRFD and ASD designs	Greater safety to occupants	Same	Increased cost due to higher load demands	Increased public safety due to connections capable of supporting increased loads
Chapter 23	Adds section for Cross Laminated Timber allowing for the use of new materials	Greater material selection capability	Reduced building cost via greater material selection and increased competition. Allows for greater use of a sustainable material.	Same	Reduced cost via greater material selection and increased competition	None
2304.12.2.5	Adds ventilation requirements below balconies	Reduces common risk of wood rot and collapse	Reduces common risk of wood rot and collapse	Same	Increased upfront cost but reduced life cycle cost by reducing repairs due to rot	Increased public safety by reducing risk of collapse
Chapter 35	References most recent design standards	Updates out-of-date standards	References are based on most recent research	Varies	Varies	Increased public safety by incorporating knowledge gained from most recent research