**CALCULATOR Formulas for RISK SCORE:**

Risk %Percentage

1. **Year Built** 
   1. (if “**Year Built**” Is older than 1975, **divide** age by 1,127)
      * example: IF year is 2003, **divide** 20 by 1,127 = 1.77% or 0.0177
   2. (If “**Year Built**” Is newer than 1975, **divide** age by 1,435)
      * example: IF year is 1960, **divide** 63 by 1,435 = 4.39% or 0.0439
2. **Construction Type**
   1. ISO1 – Frame or Brick Veneer = 2.043%
   2. ISO2 – Joisted Masonry = 2.012%
   3. ISO3 – Metal Non-combustible = -1.493% (number should be negative)
   4. ISO4 – Masonry Non-combustible = -2.042% (number should be negative)
   5. ISO5 – Modified Fire Resistive = -4.116% (number should be negative)
   6. ISO6 – Fire Resistive = -5.187% (number should be negative)
3. **Building Type**
   1. Family Dwelling = 3.86%
   2. Apartment = 8.27%
   3. Office = 1.63%
   4. Mercantile/Retail = 4.88%
   5. Restaurant = 8.23%
   6. Professional & Public Services = 2.91%
   7. Church = 3.14%
   8. Service Station = 4.83%
   9. Industrial = 5.92%
   10. Vacant = -1.00% (number should be negative)
   11. Warehouse = 2.43%
4. **Build Quality**
   1. Cost Effective = 2.34%
   2. Standard = 1.67%
   3. Standard/Superior = 1.26%
   4. Superior = -0.97% (number should be negative)
   5. High-End = -1.67% (number should be negative)
   6. High-End plus (+) = -1.93% (number should be negative)
   7. High-End Deluxe = -2.11% (number should be negative)
5. **Number of stories**
   1. 1-2 stories = 0%
   2. 3 stories = 1.60%
   3. 4 stories = 2.20%
   4. After 4 stories = +0.60% per story
   5. After 17 stories = +0.15% per story
6. **Area**
   1. Less than 5,000 sqft = 0%
   2. Between 5,000 to 9,999 sqft = 1.47%
   3. Between 10,000 and 14,999 sqft = 2.50%
   4. Between 15,000 and 19,999 sqft = 5.78%
   5. 20,000 or more = 10.35%
7. **Roof Type**
   1. Asphalt Shingle = 2.00%
   2. Tile Shingle = -0.25% (number should be negative)
   3. Wood Shake = 2.25%
   4. Slate Shingle = -0.75% (number should be negative)
   5. Metal = 1.00%
   6. Built-Up = -0.50% (number should be negative)
   7. Unknown = 2.00%
8. **Foundation**
   1. (Select) = 0%
   2. Unknown = 0.12%
   3. Yes = 0.32%
   4. No = 0%
9. **Burglar alarm**
   1. (Select) = 0.10%
   2. N/A = 0.25%
   3. Unknown = 0.25%
   4. Yes = -0.75% (number should be negative)
   5. No = 2.00%

9b. **Connected to Central Station (burglar alarm)?**

1. (Select) = 0%
2. N/A = 0%
3. Unknown = 0%
4. Yes = -1.00 (number should be negative)
5. No = 0%
6. **Fire Alarm**
   1. (Select) = 0.10%
   2. N/A = 0.10%
   3. Unknown = 0.10%
   4. Yes = -0.50% (number should be negative)
   5. No = 1.00%
7. **Connected to Central Station (fire alarm)?**
8. (Select) = 0%
9. N/A = 0%
10. Unknown = 0%
11. Yes = -0.50% (number should be negative)
12. No = 0%
13. **Sprinklers**
    1. (Select) = 0%
    2. N/A = 0%
    3. Unknown = 0%
    4. Yes = -0.10% (number should be negative)
    5. No = 0.00%

12a. **% - Percentage of building sprinklered.**

1. Unknown = 0%
2. None = 0%
3. 10% - 25% = -0.50% (number should be negative)
4. 25% - 50% = -0.75% (number should be negative)
5. 50% - 75% = -0.85% (number should be negative)
6. 75% - 100% = -2.00% (number should be negative)
7. **Protection class (REVIEW CRITERIA)**

Protection Class calculation criteria:

* 1. Nearest Fire Station
     + Less than 1 mile = 50
     + 1 mile = 50
     + 2 miles = 40
     + 3 miles = 35
     + 4 miles = 30
     + 5 miles = 30
     + Greater than 5 miles = 2
  2. Fire Hydrant within 1,000 ft
     + Yes = 40
     + No = -12 (number should be negative)
  3. Volunteer Department?
     + (Select) = 0
     + Yes = 40
     + No = -12 (number should be negative)
  4. Mobile Tanks?
     + (Select) = 0
     + Yes = 10
     + No = 0

PROTECTION CLASS TOTAL = a + b + c + d

If total is equal to or greater than 90 = Class 1

equal to or greater than 80 = Class 2

equal to or greater than 70 = Class 3

equal to or greater than 60 = Class 4

equal to or greater than 50 = Class 5

equal to or greater than 40 = Class 6

equal to or greater than 30 = Class 7

equal to or greater than 20 = Class 8

equal to or greater than 10 = Class 9

LESS than 10 = Class 10

* 1. Class 1-7 = 0%
  2. Class 8 = 1.00%
  3. Class 9 = 3.00%
  4. Class 10 = 5.00%

1. **Violent Crime score (PULL DATA FROM:**

https://www.bestplaces.net/crime/zip-code/STATE/CITY/ZIP CODE

* 1. (Select) = 0.00%
  2. Unknown = 1.25%
  3. 0 – 25 = 0%
  4. 25 – 50 = 1.00%
  5. 50 – 75 = 1.50%
  6. 75 – 100 = 3.00%

1. **Property Crime score (PULL DATA FROM:**

https://www.bestplaces.net/crime/zip-code/STATE/CITY/ZIP CODE

* 1. (Select) = 0.00%
  2. Unknown = 1.25%
  3. 0 – 25 = 0%
  4. 25 – 50 = 1.00%
  5. 50 – 75 = 1.50%
  6. 75 – 100 = 3.00%

1. **STOCK**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
2. **Cords & Wires**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
3. **Heavy Furniture**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
4. **Vehicle Storage**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
5. **Tools & Equipment**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
6. **Wood, Cloth, Paper, Plastics**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
7. **Oils & other Flammables**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Low Density = 1.00%
   4. Medium Density = 1.50%
   5. High Density = 2.00%
8. **Cooking?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%

23b. **Ansul Type suppression system?**

* 1. N/A = 0.00%
  2. Yes = 0.00%
  3. No = 3.09%

1. **Restaurant, Bar or Club?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%
2. **Manufacturing?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%
3. **Mechanical Repair?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%
4. **Welding & Fabrication?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%
5. **Work w/ Chemicals or Oils?**
   1. (Select) = 1.00%
   2. Yes = 3.00%
   3. No = 0.00%
6. **Fire Extinguishers**
   1. (Select) = 0.00%
   2. Unknown = 0.00%
   3. Yes = -2.00% (number should be negative)
   4. No = 0.00%

29a. **Extinguishers Inspected & Tagged in last 3 years?**

1. No data needed
2. **Wind States?**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. Eastern Colorado = 2.00%
   4. Iowa = 1.85%
   5. Kansas = 2.85%
   6. Nebraska = 2.50%
   7. North Texas & Panhandle = 3.00%
   8. Oklahoma = 2.75%
   9. South Dakota = 1.15%
   10. Southern Minnesota = 1.50%
3. **Coastal?**
   1. (Select) = 0.00%
   2. None = 0.00%
   3. East Coast = 2.46%
   4. Florida = 5.23%
   5. Gulf Coast = 3.23%
4. **Distance to Coast**
   1. (Select) = 0.00%
   2. 0-5 mi. = 10.00%
   3. 5-10 mi. = 7.00%
   4. 10-20 mi. 3.00%
   5. 10-25 mi. = 1.00%
   6. 25+ mi. = 0.00%
5. **Flood Zone**
   1. (Select) = 0.00%
   2. Unknown = 1.07%
   3. B = 0.11%
   4. C = 0.11%
   5. X = 0.11%
   6. A = 0.13%
   7. AO = 0.18%
   8. AH = 0.28%
   9. A1-A30 = 0.53%
   10. AE = 0.76%
   11. A99 = 1.03%
   12. AR = 1.27%
   13. AR/AE = 1.54%
   14. AR/AO = 1.73%
   15. AR/A1-A30 = 2.07%
   16. AR/A = 2.29%
   17. V = 2.53%
   18. VE = 2.78%
   19. V1-V30 = 3.11%
6. **Experienced Prior Flood?**
   1. (Select) = 1.18%
   2. Unknown = 1.06%
   3. Yes = 3.13%
   4. No = 0.00%
7. **Wildfire Probability**
   1. None = 0.00%
   2. Unknown = 2.97%
   3. 2% = 0.53%
   4. 5% = 1.08%
   5. 10% = 2.26%
   6. 15% = 3.21%
   7. 20% = 4.32%
   8. 25% = 5.19%
   9. 30% = 6.37%
   10. 40% = 7.23%
   11. 50% = 8.14%
8. **Brush Area**
   1. (Select) = 1.00%
   2. Unknown = 1.06%
   3. Yes = 2.78%
   4. No = 0.00%
9. **Quake Hazard**
   1. (Select) = 1.08%
   2. Unknown = 1.44%
   3. White = 0.12%
   4. Blue = 0.53%
   5. Green = 1.32%
   6. Yellow = 2.00%
   7. Orange = 2.43%
   8. Red = 2.89%
   9. Purple = 3.96%
10. **Prior Losses in last 5 years:**
    1. If “No Loss” box is checked = 0.00%
    2. If “No Loss” box is unchecked = 3.00%