

Build the Knowledge Base

1. IF cracks in load-bearing walls are less than or equal to 3 mm, THEN the building has Minor Structural Damage.
2. IF cracks in load-bearing walls are greater than 3 mm and less than or equal to 5 mm, THEN the building has Moderate Structural Damage.
3. IF cracks in load-bearing walls are greater than 5 mm and less than or equal to 10 mm, THEN the building has Moderate Structural Damage.
4. IF the building is leaning less than or equal to 1% of its height, THEN the building has Minor Structural Damage.
5. IF the building is leaning greater than 1% and less than or equal to 2% of its height, THEN the building has Moderate Structural Damage.
6. IF the building is leaning greater than 2% of its height, THEN the building has Severe Structural Damage.
7. IF the roof is sagging less than or equal to 3 cm, THEN the building has Minor Structural Damage.
8. IF the roof is sagging greater than 3 cm and less than or equal to 8 cm, THEN the building has Moderate Structural Damage.
9. IF the roof is sagging greater than 8 cm, THEN the building has Severe Structural Damage.
10. IF the roof is visibly sagging, THEN the roof has Severe Damage.
11. IF the building has been exposed to fire with a fire level less than or equal to 30%, THEN the building has Minor Fire Damage.
12. IF the building has been exposed to fire with a fire level greater than 30% and less than or equal to 70%, THEN the building has Moderate Fire Damage.
13. IF the building has been exposed to fire with a fire level greater than 70%, THEN the building has Severe Fire Damage.
14. IF the building is leaning less than or equal to 1%, the roof is sagging less than or equal to 3 cm, and cracks in load-bearing walls are less than or equal to 3 mm, THEN the building has Minor Structural Damage.

15. IF the cracks in the foundation are moderate (greater than 5 mm but less than or equal to 10 mm) and the building is leaning between 1% and 2%, THEN the building has Moderate Structural Damage.
16. IF the building has partial collapse of walls or roof, THEN the building has Severe Structural Damage.
17. IF the foundation has cracks less than or equal to 5 mm, THEN the foundation has Minor Damage.
18. IF the foundation has cracks greater than 5 mm and less than or equal to 10 mm, THEN the foundation has Moderate Damage.
19. IF the foundation has cracks greater than 10 mm, THEN the foundation has Severe Damage.
20. IF the fire level is greater than 70% and the foundation cracks are greater than 10 mm, THEN the building has Severe Fire Damage and Foundation Damage, resulting in Severe Structural Damage.
21. IF the leaning angle is greater than 2% and the roof is sagging by more than 8 cm, THEN the building has Severe Structural Damage.
22. IF the cracks in load-bearing walls are greater than 5 mm and the fire level is greater than 70%, THEN the building has Severe Structural Damage.
23. IF the fire level is between 30% and 70% and the cracks in the foundation are severe, THEN the building has Moderate Structural Damage.
24. IF the building has minor cracks, minor leaning, minor roof sagging, minor foundation cracks, and minor fire damage, THEN the building has Minor Structural Damage.
25. IF the building has any moderate damage (cracks, leaning, roof sagging, foundation cracks, or fire damage), THEN the building has Moderate Structural Damage.
26. IF the building has any severe damage (cracks, leaning, roof sagging, foundation cracks, or fire damage), THEN the building has Severe Structural Damage.
27. IF the building has no visible cracks or damage, THEN the building has No Structural Damage.