

Name: Jaiswal and Wald (2008) PAGER Inventory Database v1.3.xls  
 Authors: Kishor Jaiswal and David Wald  
 Release: 15-Feb-08  
 Version: v1.3  
 Last Updated: 29-Aug-08  
 Address: U.S. Geological Survey 1711 Illinois st, Golden, Colorado 80401

- Notes:
1. This is a electronic copy of Appendix VII of USGS OFR by Jaiswal and Wald (2008)
  2. It contains four spreadsheets namely- Urban\_Res, Rural\_Res, Urban\_Non\_Res and Rural\_Non\_Res
  3. Each spreadsheet provides building inventory distribution for a given density class (Urban or Rural) and occupancy type (Residential or Non-residential)
  4. First row indicates column headers. From second row onwards, each represents a geographic region (e.g. Country Name) and associated inventory distribution by construction types.
  5. Column A to P indicate additional information specific to each country e.g. source of data, vintage, rating etc.
  6. First row of column Q to DA indicate abbreviations used for PAGER construction types (as shown in Table 1 of this spreadsheet)
  7. Column Q to DA provides country specific inventory distribution in terms of fractions (0 TO 1) which adds to 1 for country/region with exposure OR 0 if no exposure

Key Updates:

1. Slovenia UFB4 class has been assigned to UFB2 with additional information about commonly used mortar material
2. Turkey Wood frame construction in Turkey is assigned W2 instead of W1
3. Japan RC SW Walls cast in-situ is assigned as C2L instead of C2. W and W1 classes were modified to W1 and W2 respectively
4. Germany Stone masonry in Germany (DS2) has 5.5 % exposure instead of 0.5% (instead of very low, it is Low as per WHE expert)
5. Changes in Neighbor assignments Republic of Korea has same distribution as Japan with above modifications

Table 1. PAGER Construction Types Used for Inventory Development (Appendix I)

| Label      | Description  |
|------------|--|
| <b>W</b>   | <b>WOOD</b>  |
| W1         | Wood Frame, Wood Stud, Wood, Stucco, or Brick Veneer   |
| W2         | Wood Frame, Heavy Members, Diagonals or Bamboo Lattice, Mud Infill   |
| W3         | Wood Frame, Prefabricated Steel Stud Panels, Wood or Stucco Exterior Walls   |
| W4         | Large building   |
| <b>S</b>   | <b>STEEL</b>   |
| S1         | Steel Moment Frame   |
| S1L        | Low-Rise   |
| S1M        | Mid-Rise   |
| S1H        | High-Rise  |
| S2         | Steel Braced Frame   |
| S2L        | Low-Rise   |
| S2M        | Mid-Rise   |
| S2H        | High-Rise  |
| S3         | Steel Light Frame  |
| S4         | Steel Frame with Cast-in-Place Concrete Shear Walls  |
| S4L        | Low-Rise   |
| S4M        | Mid-Rise   |
| S4H        | High-Rise  |
| S5         | Steel Frame with Unreinforced Masonry Infill Walls   |
| S5L        | Low-Rise   |
| S5M        | Mid-Rise   |
| S5H        | High-Rise  |
| <b>C</b>   | <b>REINFORCED CONCRETE</b>   |
| C1         | Ductile Reinforced Concrete Moment Frame   |
| C1L        | Low-Rise   |
| C1M        | Mid-Rise   |
| C1H        | High-Rise  |
| C2         | Reinforced Concrete Shear Walls  |
| C2L        | Low-Rise   |
| C2M        | Mid-Rise   |
| C2H        | High-Rise  |
| C3         | Nonductile Reinforced Concrete Frame with Masonry Infill Walls   |
| C3L        | Low-Rise   |
| C3M        | Mid-Rise   |
| C3H        | High-Rise  |
| C4         | Nonductile Reinforced Concrete Frame without Masonry Infill Walls  |
| C4L        | Low-Rise   |
| C4M        | Mid-Rise   |
| C4H        | High-Rise  |
| C5         | Steel Reinforced Concrete (Steel Members Encased in Reinforced Concrete)   |
| C5L        | Low-Rise   |
| C5M        | Mid-Rise   |
| C5H        | High-Rise  |
| PC1        | Precast Concrete Tilt-Up Walls   |
| PC2        | Precast Concrete Frames with Concrete Shear Walls  |
| PC2L       | Low-Rise   |
| PC2M       | Mid-Rise   |
| PC2H       | High-Rise  |
| <b>RM</b>  | <b>REINFORCED MASONRY</b>  |
| RM1        | Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms  |
| RM1L       | Low-Rise   |
| RM1M       | Mid-Rise (4+ stories)  |
| RM2        | Reinforced Masonry Bearing Walls with Concrete Diaphragm   |
| RM2L       | Low-Rise   |
| RM2M       | Mid-Rise   |
| RM2H       | High-Rise  |
| MB1        | Mobile Homes   |
| <b>M</b>   | <b>MUD WALLS</b>   |
| M1         | Mud walls without horizontal wood elements   |
| M2         | Mud walls with horizontal wood elements  |
| <b>A</b>   | <b>ADOBE BLOCK, (UNBAKED DRIED MUD BLOCK) WALLS</b>  |
| A1         | Adobe block, mud mortar, wood roof and floors  |
| A2         | Same as A1, bamboo, straw, and thatch roof   |
| A3         | Same as A1, cement-sand mortar   |
| A4         | Same as A1, reinforced concrete bond beam, case and mud roof   |
| A5         | Same as A1, with bamboo or rope reinforcement  |
| <b>RE</b>  | <b>RAMMED EARTH/PNEUMATICALLY IMPACTED STABILIZED EARTH</b>  |
| RS         | <b>RUBBLE STONE, (FIELD STONE) MASONRY</b>   |
| RS1        | Local field stone dry stacked (no mortar), Timber floors, Flusher, earth, or metal roof.   |
| RS2        | Same as RS1 with mud mortar.   |
| RS3        | Same as RS1 with lime mortar.  |
| RS4        | Same as RS1 with cement mortar, vaulted brick roof and floors  |
| RS5        | Same as RS1 with cement mortar and reinforced concrete bond beam.  |
| <b>DS</b>  | <b>RECTANGULAR CUT STONE MASONRY BLOCK</b>   |
| DS1        | Rectangular cut stone masonry block with mud mortar, timber roof and floors.   |
| DS2        | Same as DS1 with lime mortar   |
| DS3        | Same as DS1 with cement mortar   |
| DS4        | Same as DS1 with reinforced concrete floors and roof   |
| <b>UFB</b> | <b>UNREINFORCED FIRED BRICK MASONRY</b>  |
| UFB1       | Unreinforced brick masonry in mud mortar without timber posts  |
| UFB2       | Unreinforced brick masonry in mud mortar with timber posts   |
| UFB3       | Unreinforced fired brick masonry, cement mortar, timber flooring, timber or steel beams and columns, tie courses (bricks aligned perpendicular to the plane of the wall)               |
| UFB4       | Same as UFB3, but with reinforced concrete floor and roof slabs  |
| <b>UCB</b> | <b>UNREINFORCED CONCRETE BLOCK MASONRY, LIMESTRONG MORTAR</b>  |
| <b>MS</b>  | <b>MASSIVE STONE MASONRY IN LIMESTRONG MORTAR</b>  |
| <b>TU</b>  | <b>PRECAST CONCRETE TILT-UP WALLS (SAME AS HAZUS P1)</b>   |
| <b>INF</b> | <b>INFORMAL CONSTRUCTIONS (PARTS OF SLUMS/QUARTERS)</b><br>Constructions made of wood/plastic sheets/GI Sheets/light metal or composite etc., not conforming to engineering standards. |
| <b>UNK</b> | Unknown Category (Not specified)   |







