


## Structural Systems: Recommended Materials

|  | Concrete Structure | Insulated Concrete Forming (ICF) | Steel Framing | Pre-engineered Steel Framing | Masonry Bearing Wall | Heavy Timber Framing | Light-gauge Steel Framing | Lumber Framing |
|--|--------------------|----------------------------------|---------------|------------------------------|----------------------|----------------------|---------------------------|----------------|
| <b>Group 1</b><br>HQ, Command, ECFs, Chapels           | ●                  | ◐                                | ◐             | ●                            | ◐                    | ◐                    | ◐                         | ◐              |
| <b>Group 2</b><br>Admin. Squad Ops, Community Support  | ●                  | ◐                                | ◐             | ●                            | ◐                    | ◐                    | ◐                         | ◐              |
| <b>Group 3</b><br>Industrial and Flightline Operations | ●                  | ○                                | ○             | ●                            | ◐                    | ○                    | ○                         | ○              |
| <b>Group 4</b><br>Family Housing                       | ○                  | ○                                | ○             | ◐                            | ○                    | ◐                    | ●                         | ●              |

Most Appropriate ←  Least Appropriate

**General Notes:**

1. Ratings based on post and beam concrete structure
2. ICF used for Groups 1 and 2 facilities only with compatible exterior materials and finishes; material returns at jambs, heads, sills, etc., of doors and windows shall match Base standards
3. Pre-engineered structure is preferred for frames only; thermal envelopes, exterior materials and finishes must meet AF corporate standards
4. Masonry includes concrete block or brick ideally used for interior bearing partitions and thermal mass
5. Light-gauge framing may be used in Group 4 and for smaller structures in Group 1 and 2
6. Consider Federal HPSB Guiding Principles green product procurement requirements

EPA Resources: <http://www.epa.gov/>  
<https://www.epa.gov/greenerproducts>  
<http://www.biopreferred.gov/>