The smart builder's shelving selector

| Note: All shelves measured 11" wide before the addition of edging. | Match the shelf length you want with the material you're considering. The result tells you how much in inches our sample sagged in the center while bearing a 64-lb load. (Edging is 3/4×11/4" hardwood.) | | | | | | |
|--|---|------------------------|--------------------------------------|---|---|--|--|
| material | you need to know | edging difference | 24" | 32" | shelf span 36" | 42" | 48" |
| 3/4" wheat stalk | This option looks good for utility purposes, with its painted bullnose edge. We found it priced at about \$11 for a 1x8' piece. It needs a lot of support. | no edge | amour ⁵ ⁄64 | nt of saggin | ng in inche | s over shel | f span 52/64 |
| 3/4" melamine | Even with an edge, this common shelving material developed a noticeable sag at 36". A 4x8' sheet costs \$25 at our home center. | no edge oak edge | ³ / ₆₄ | ⁹ /64 ⁵ /64 | ¹⁹ / ₆₄ ⁸ / ₆₄ | ³³ / ₆₄ | ⁵² /64 ²⁶ /64 |
| ³ / ₄ " particleboard | With a solid-wood edge added, this inexpensive material (\$11.50 per sheet) can handle medium loads in a garage or workshop. | no edge pine edge | ⁷ / ₆₄ | ¹⁵ / ₆₄ ⁵ / ₆₄ | ²⁷ /64 ⁶ /64 | ⁴⁴ /64 ¹² /64 | 1 ¹⁸ ⁄64 |
| 3/4" particleboard with plastic laminate | A simple layer of plastic laminate (about \$2 per square foot) on each face adds a surprising amount of strength to particleboard. | no edge oak edge | ¹ / ₆₄ | ⁵ /64 ⁴ /64 | ¹⁰ / ₆₄ ⁸ / ₆₄ | 17/ ₆₄ | ³⁰ / ₆₄ |
| 3/4" oriented-strand board (OSB) | When you make rough shelving, note that medium- cost OSB (\$27 per sheet) offers more strength than particleboard. | no edge pine edge | ⁵ /64 | ⁸ /64 ⁴ /64 | ⁹ /64 ⁶ /64 | 18/ ₆₄ | ²⁷ / ₆₄ |
| ³ / ₄ " medium-density fiberboard (MDF) | MDF is comparable to the other manufactured sheet goods in strength, but has a smooth surface. Our sheet cost about \$20. | no edge pine edge | ³ /64 ² /64 | ⁹ /64 ² /64 | ¹⁵ / ₆₄ | ³² / ₆₄ | ⁴⁷ /64 ²¹ /64 |
| ³ ⁄ ₄ " oak-veneer plywood | With an edge, this choice gives you furniture-like appearance along with visually acceptable deflection up to 36". It's expensive, at \$40 per sheet. | no edge oak edge | ¹ / ₆₄ | ⁴ / ₆₄ ³ / ₆₄ | ⁷ /64 ⁵ /64 | ⁷ /64 | ⁷ /64 |
| 3/4" Baltic birch plywood | This is the winner of our strength test. However, its face has a bland appearance in comparison to solid wood, and we paid a hefty \$46 for a 5x5' sheet. | no edge poplar edge | 0 | ⁴ / ₆₄ | ⁶ / ₆₄ | ¹⁰ / ₆₄ | ¹⁵ /64 ⁶ /64 |
| ³/4" solid oak | There's no need for edging unless you build shelves in the 48" range. But it's expensive: \$5.50 per board foot at our home center. | no edge oak edge | 1/ ₆₄ | ¹ / ₆₄ | ³ /64 ² /64 | ⁹ /64 ⁴ /64 | ²⁰ / ₆₄ |
| 3/4" solid pine | With an edge, it performs as well as oak, and we paid only \$1.50 per board foot. | no edge pine edge | ¹ / ₆₄ | ⁵ ⁄ ₆₄ | ⁹ / ₆₄ | ¹⁵ / ₆₄ | ²⁰ / ₆₄ |