

Architectural  
Woodwork Standards

**INDEX**

# INDEX

*f* = figure, *t* = table

1 mil, 490

## A

Abacus, 424  
Abrasion resistance, 490  
Abrasive planing, 132  
ABS (acrylonitrile butadiene styrene), 490  
Acanthus, 424  
Acrylic lacquer, 113t–115t, 122, 490  
Acrylonitrile butadiene styrene (ABS), 490  
Adhesion, 490  
Adhesives  
    cold press, 490  
    contact, 493  
    defined, 490  
    guidelines, 391  
    hot press, 490  
    lumber, 60  
    panel, 77  
    type I fully waterproof, 490  
    type II water resistant, 490  
    wall/ceiling surfacings and partitions, 230  
Adjacent, 490  
Adjacent panel, 490  
Adjustable shelves, 490  
Agrifiber/agrofiber, 74  
Agrofiber, 490  
Air dried, 490  
Alder, Red, 49  
Alignment, 334  
All heart, 490  
Americans with Disabilities Act (ADA), 390  
Anchor strips, 321, 490  
Anchorage, 330–331  
fasteners, 331  
Anchorage fastener, 490  
Angle bead, 424  
Anigre, 49  
Aniline dye, 490  
Annual rings, 46, 47f  
Antistatic laminates, 86  
Approvals, 25  
Aprons, 316, 326, 490  
Arch, 424  
Architectural ornamentation, 423–428, 429f–435f  
Architectural woodwork  
    care and storage, 37–42  
    defined, 490  
    drawing guidelines, 21  
    moisture, 20  
    specifications, 20  
Architectural Woodwork Institute (AWI), 20

Architectural Woodwork Manufacturers  
    Association of Canada (AWMAC), 21  
Architectural Woodwork Standards (AWS), 18–19  
Architrave, 424  
Archivolt, 424  
Arris, 490  
Articulation joint, 490  
Artisans, 143–144  
Ash, White, 49  
Assembly-1, 490  
Assembly-2, 490  
Astragal, 424, 500

## B

Back, 490  
Back band, 500  
Back priming, 490  
Back veneer, 490  
Backed out, 491  
Backer, 105  
Backer material, 491  
Backing sheet, 85, 176  
Baguette, 424  
Balance match, 82  
    flitch selection, 203  
    wall/ceiling surfacings and partitions, 196f  
Balance sheet, 105  
Balanced construction, 491  
Balanced end match, 197f  
Balanced match, 491  
Balancing sheet, 491  
Balancing species, 491  
Baluster, 491  
Balustrade, 491  
Bamboo, 75  
Banded, 491  
Barber pole, 111, 491  
Bark pocket, 491  
Base, 500  
    built up moldings, 139  
Base adjusters, 304  
Base block, 500  
Base cabinet  
    concentrated load test, 399  
    door and door hinge durability test, 400  
    door impact test, 401  
    drawer and door pull test, 401  
    drawer bottom impact test, 401  
    drawer rolling load test, 402  
    with drawers (200 series), 473f–474f  
    shelf load test, 402  
    structural integrity test, 399  
    submersion test, 400

table structural integrity test, 402  
    est unit, 398  
    torsion test, 399  
    without drawers (100 series), 470f–472f  
Base cap, 500  
Base cap patterns, 409f–412f  
Base patterns, 409f–412f  
Base shoe, 500  
Baseboard, 500  
Basswood, 49  
Bead, 424  
Bead and reel, 424  
Bead molding, 500  
Bed mold patterns, 419f  
Bed molding, 500  
Bedding in putty, 491  
Beech, American, 49  
Beech, European, 49  
Belt and base courses, 424  
Bevel, 491  
Beveled edge, 491  
Billet, 424  
Birch, Yellow, 49  
Bird's eye, 491  
Biscuit spline, 322, 394f, 491  
Bleaching, 491  
Bleeding, 491  
Blending, 491  
Blind corner, 491  
Blind dado, 293  
Blind dovetail joint, 395f  
Blind mortise and tenon joint, 394f  
Blinds, 142, 152, 155  
Blistering, 344, 491  
Block laminated woodwork, 136, 154  
Block lamination, 178  
Blocking, 491  
Blue stain, 112  
Blueprint sequenced panels, 202, 231, 491  
Blushing, 491  
Board, 491  
Board foot, 492  
Bolection molding, 424  
Book and butt match, 84  
Book matching, 81, 492  
Bored hole shelf rest systems, 321  
Boss, 424  
Bow, 492, 508  
Box match, 83  
Box stringer. *see* Closed stringer  
Boxed stringer, 179  
Bracket, 424  
Brashness, 492

- Brattishing, 424  
 Bread/cutting board, 321, 326  
 Broken stripe, 506  
 B-stage curing, 490  
 Bubbling, 344  
 Bucks, 492  
 Bugle head screw, 492  
 Building code requirements, 390  
 Bullet resistant doors, 241, 256  
 Bullnose, 492  
 Burl  
   blending, 492  
   conspicuous, 492  
   defined, 492  
 Butcher block, 492  
 Butt hinge, 291  
 Butt joint, 222, 224, 292f, 394f, 492  
 Butt matching, 81
- C**
- Cabinet design series, 290, 469f–488f  
   base cabinets with drawers (200 series), 473f–474f  
   base cabinets without drawers (100 series), 470f–472f  
   library cabinets (600 series), 483f–484f  
   movable cabinets (700 series), 485f–488f  
   special base casework heights, 469  
   tall storage cabinets (400 series), 477–480f  
   wall hung cabinets (300 series), 475f–476f  
   wardrobe cabinets (500 series), 481f–482f  
 Cabinet face, 492  
 Cabinet liner, 85, 492  
 Cabinet unit, 492  
 Cable molding, 424  
 Cant strip, 492  
 Cantilever, 492  
 Cantilever countertops, 358  
 Capital, 424  
 Captured, 492  
 Care, 37  
 Casework, 277–334  
   adjustable shelf loading/deflection, 291  
   anchor strips, 321  
   base cabinets, 299  
   cabinet and door interface, 288, 297  
   cabinet construction, 296  
   cabinet design series, 290, 297  
   categories, 285  
   cathedral, 304  
   clearances, 323–325  
   clothes poles/rods, 321  
   compliance requirements, 32  
     assembly rules, 310–326  
     general, 295–301  
     installation, 326–332  
     machining rules, 309  
     material rules, 305–308  
     product, 300–326  
     test, 333–334  
   concealed surfaces, 285–286, 294, 296, 303, 305  
   concept drawings, 298  
   construction details, 292–293  
   construction types, 21  
   contract documents, 285, 295  
   contractor, 327  
   decorative laminate, 285, 307–308, 326  
   default stipulation, 302  
   defined, 492  
   design examples, 440f–468f  
     banks and courts, 444f–446f  
     basic cabinetry, 467f–468f  
     church fittings, 466f  
     corporate woodwork, 448f–452f  
     furniture and fixtures, 453f–460f  
     judge's bench, 447f  
     reception, 461f–465f  
     schools and libraries, 440f–443f  
   design series, 21  
   dimension ranges, 298–299  
   door and applied drawer front profiles, 289–290  
   doors, 313–316  
   drawer box, 306  
   drawer selection guide, 290  
   drawers, 310–312, 326  
   economy grade, 300  
   ends and divisions, 316  
   exposed edges, 326  
   exposed exterior, 296, 302, 306  
   exposed interior surfaces, 286, 296, 302, 306  
   exposed surfaces, 285  
   face frame, 288, 297, 297f, 299, 324  
   finishing, 119  
   flush inset door, 326  
   flushness, 329  
   frameless construction, 288, 296, 297f, 299, 304  
   grade, 295  
   hardware, 303–305  
   hinge selection guide, 291  
   industry practices, 298–300  
   installer, 327  
   integrity, 290, 297, 398–402  
   joinery, 322  
   joints, 310  
   layout, 298–300  
   layout requirements of grained or patterned by grade, 289  
   modular, 500  
   moveable cabinets, 322  
   opaque finish, 306  
   overlay, 288  
   overlays, 297  
   panel components, 304  
   premium grade, 300  
   pullout shelves, 321  
   refinishing/refacing/refurbishing, 22, 403  
   scribing, 323  
   semi-exposed surfaces, 285–286, 296, 302, 305–307  
   shelves, 318–321  
   solid phenolic, 326  
   solid phenolic laminates, 296  
   specifications, 285, 294  
   stretcher, 299  
   surface categories, 295–296  
   surface finish requirements, 287  
   tolerances, 323–325  
   tops and bottoms, 316–317  
   transparent finishes, 306  
   twist, 325  
   typical inclusions/exclusions, 301  
   wall anchorage, 330–331  
   wardrobes, 321  
   warp, 325–326  
   wood, 285, 325–326  
 Casing, 500  
 Casing patterns, 413f–416f  
 Casters, 322  
 Catalyzed, 492  
 Cathedral, 177, 256, 304  
 Cathedral grain, 492  
 Caulk, 492  
 Caulked joints, 230  
 Caulking, 323, 330, 332, 367  
 Cavetto, 424  
 Cedar, Western Red, 49  
 Ceilings, built up moldings, 138  
 Center match, 82, 492  
 Chain of custody, 492  
 Chair rail patterns, 421f–422f  
 Chair rails, 138, 500  
 Chamfer, 492  
 Character mark, 492  
 Characteristics, 492  
 Chatter, 492



# INDEX

*f* = figure, *t* = table

- Checking, 493  
Checks, 493  
Chemical resistance, 396–397  
Cherry, American Black, 50  
Chip marks, 493  
Chord segmentation, 493  
Cinquefoil, 424  
Classical order, 428  
Clearances, 323–325  
Climate, 493  
Climate controlled, 493  
Closed grain, 53, 493, 497  
Closed stringer, 177, 493  
Closet, 152–153  
Clothes poles/rods, 321  
Coffer, 493  
Cold press adhesive, 490  
Color, compliance requirements, 27  
Color through decorative laminates, 86  
Column, 424  
Comb grain, 493  
Combination core, 74  
Combination grain, 493  
Compatible for color and grain, 493  
Compatible species, 493  
Composite column, 428  
Concealed surfaces, 151, 176, 179, 493  
Concentrated load test, 399  
Console, 424  
Conspicuous, 493  
Contact adhesive, 493  
Contractor, 160, 183, 493  
Conversion varnish, 493  
Conversions, 404t–405t  
Cope/coped, 493  
Corbel, 425  
Core  
    defined, 493  
    hollow, 493  
    mineral, 493  
    primary core materials, 73–75  
    solid, 493  
Core veneered woodwork, 136  
Corinthian order, 425, 428  
Cornice, 140f, 425, 500  
Corona, 425  
Countertops, 335–371  
    abrasion resistance, 345  
    adhesives/joint filler, 356  
    assembly rules, 356–363  
    back splashes, 356  
    cantilever, 358  
    chemical/stain resistance, 345  
    combination material, 342  
    compliance requirements, 32  
        general, 350–351  
        installation, 364–369  
        product, 352–363  
        test, 370–371  
    concealed surfaces, 350, 353  
    configurations, 342–343  
    construction types, 21  
    contract documents, 350  
    contractor, 364  
    edge application sequence, 356  
    epoxy resin, 348, 350, 352, 354, 356, 362, 369  
    equipment cutouts, 367  
    exposed edges, 358  
    exposed surfaces, 350, 353–355  
    factory finishing, 353  
    fastening, 366  
    flatness, 358  
    flushness, 366  
    gaps, 366  
    grade, 350  
    HPDL, 342, 352, 354, 359–360, 367–368  
    fabrication/installation of, 342  
    problems, causes and prevention, 344  
    industry practices, 350–351  
    installer, 364  
    joints at assembled woodwork, 356–357  
    machining rules, 354–356  
    material rules, 352–353  
    metal trim rims, 358  
    natural/engineered stone, 348, 350, 352, 356, 362–363, 369  
    opaque finish, 353  
    overhang, 358  
    post formed HPDL, 342  
    recommendations, 349  
    scribing, 356  
    solid laminated, 342  
    solid phenolic, 348, 350, 352, 354, 356, 361, 369  
    solid surface, 347, 350, 352, 354–355, 360, 368  
    solid surfacing material, 342  
    solid wood, 343  
    specifications, 349  
    transparent finish, veneer, 353  
    typical inclusions/exclusions, 351  
    unsupported spans, 358  
    wall hung, 358  
    waterproof caulk, 367  
    wood, 348–349, 352–353, 358–359  
    wood veneers, 342  
Cove, 500  
Cover sheet, 28  
Coves, 355  
Cratering, 493  
Creep, 493  
Croquets, 425  
Crook, 493, 508  
Cross bar, 494  
Cross grain, 136, 494  
Cross sanding, 179, 504  
Crossbanding, 494  
Crotch, 494  
Crown, 500  
Crown mold patterns, 417f–418f  
Cup, 494, 508  
Curb stringer, 179  
Curing, 110, 494  
Curly, 494  
Cusp, 425  
Custom grade, 145, 175, 289, 295, 350, 494  
Cut heart, 494  
Cut outs, 177  
Cutouts, 332, 355  
Cyma molding, 425  
Cyma recta, 425  
Cyma reversa, 425  
Cymatium, 425
- ## D
- Dado, 293  
    blind, 494  
    stop, 293  
    stopped joint, 494  
    through, 293  
Dado joint, 395f, 494  
Damages, 42  
Dart, 425  
Decay, 494  
Decimal conversion, 404t  
Decorative composite panels, 494  
Decorative face, 75  
Defect, 494  
    open, 494  
Deflection, 494  
Delamination, 494  
Delivery, 41  
Dentil molding, 425  
Design ideas, 407–485  
Design professional, 494

Diamond match, 83  
 Die wall, 494  
 Dimension lumber, 494  
 Dimensional change, 19, 37  
 Directional pattern match. *see* Veneer grain match  
 Discolorations, 494  
 Distressing, 494  
 Division, 494  
 Door, 264–269
 

- acceptable requirements, 251
- aesthetic compliance requirements, 251
- aesthetic grade, 255
- applied moldings, 265
- basic core types, 240
- bleed through, 256
- built up moldings, 139
- bullet-resistant, 241, 256
- cathedral, 256
- code/rule requirements, 239, 241
- compliance requirements, 31
  - general, 251–253
  - installation, 270–273
  - machine/assembly rules, 258
  - material rules, 257
  - product, 254–269
  - test, 274–275
- construction cutaways, 243–244
- construction definitions, 243
- construction details, 244–245
  - blocking options, 245f
  - Dutch door options, 245f
  - flashing options, 245f
  - glazing options, 244–245f
  - horizontal or transom meeting edge options, 244f
  - louver options, 245f
  - meeting edge options, 244f
- continuous match, 242
- contract documents, 251
- contractor, 270
- core to edge assembly, 241
- cutaway examples, 243
- cutouts, 272
- decorative laminate casework, 326
- design ideas, 249f
- edge construction and types, 242–243
- end match, 242
- exposed surfaces, 251, 255, 265–266
- exterior, 239
- face material selection, 239
- factory finishing, 246
- finishing, 119

fire ratings, 241  
 fire-rated, 251, 256  
 first class workmanship, 273  
 flush, 257, 267–268  
 glazing material, 265  
 grades, 251  
 guidelines, 21  
 hand and bevel of, 243, 246  
 handing, 253  
 hinged, 313–316  
 HPDL, 239  
 HPDL face, 243  
 industry practices, 252–253  
 installer, 270  
 joints at assembled woodwork, 266–267  
 materials for opaque finishes, 239  
 methods of construction, 251  
 pair match, 242  
 performance duty levels, 252  
 recommendations, 250  
 repairs, 272  
 semi-exposed surfaces, 251, 255  
 set match, 242  
 sheet products, 255  
 size, 256  
 sliding, 316  
 special function, 241  
 speciality cores, 241  
 specifications, 250  
 stile and rail, 246, 268–269, 315  
 symbols/abbreviations, 240  
 temporary distortions, 272  
 with transoms, 242  
 veneer faces, 241  
 veneers for transparent finishes, 239  
 warranty, 252–253  
 wood face, 243  
 x-ray doors, 256  
 Door frames, 141f, 151, 157  
 Door furnisher, 494  
 Door impact test, 401  
 Door/door hinge durability test, 401  
 Doric order, 425, 428  
 Doug fir, 50, 495  
 Dovetail joint, 292, 395f, 494  
 Dovetail molding, 425  
 Dowel, 494  
 Dowel joint, 292–293, 322, 394f, 494  
 Dowel screw joint, 293, 322  
 Doze, 495  
 Drawer and door pull test, 401  
 Drawer bottom impact test, 401

Drawer box, 306  
 Drawer lock joint, 292  
 Drawer rolling load test, 402  
 Drawers, 326  
 Drawing sheets, 28  
 Drawings, 29, 495  
 Drip groove, 355  
 Dust panels, 326  
 Dutch door, 245f  
 Dynamic load capacity, 290

## E

Eased edges, 495  
 Easements, 495  
 Echinus, 425  
 Economy grade, 145, 175, 289, 295, 350, 495  
 Edge grain, 495  
 Edge joint, 495  
 Edge profiles, 289  
 Edgebanding, 293, 495  
 Edges, exposed, 326  
 Effect, 495  
 Egg and anchor molding, 425  
 Egg and dart molding, 425  
 Egg and tongue molding, 425  
 Electrostatic shielded doors, 241, 256  
 Elevation, 495  
 End butt joint, 495  
 End grain, 495  
 End grain box match, 83  
 End match, 495  
 End matching, 81  
 Endangered species, 52  
 End-matched joints, 231  
 Engineered stone, 105  
 Engineered wood, 58  
 Entablature, 425  
 Entasis, 425  
 Epoxy resin, 105  
 Equilibrium moisture content, 495  
 Escutcheon, 495  
 Exposed end, 292  
 Exposed exterior surfaces, 495  
 Exposed fasteners, 495  
 Exposed interior surfaces, 495  
 Exposed surfaces, 150–151, 153–154, 176, 178–180, 495  
 Exterior (building), 495  
 Exterior doors, 239



# INDEX

*f* = figure, *t* = table

## F

Face, 495  
Face frame, 325–326  
Face frame construction, 495  
Face veneer, 495  
Factory finishing, 110, 179  
Factory priming, 121  
Fascia panel, 323, 330  
Fasteners, mechanical, 495  
Few, 495  
Fiber, 495  
Fiberboard core, 495  
Fiddleback, 495  
Field, 495  
    finishing, 110  
    joinery, 222  
    joints, 230  
Figure, 495  
Filler, 496  
Fillet, 425, 500  
Finger joint, 394f, 496  
Finial, 425  
Finish maintenance, 37  
Finisher, 118  
Finishing, 108–125  
    AWS finishing systems, 112, 113t–115t  
    blotchy appearance, 111  
    color match/consistency, 111  
    compliance requirements, 117–125  
        application rules, 121  
        general, 117  
        material rules, 120  
        product, 117–124  
        tests, 125  
    curing, 110  
    defects, 119  
    factory, 110  
    field, 110  
    fire retardant treatment, 112  
    general performance characteristics, 113t  
    generic coating schedule, 121  
    sheen, 111  
    sheen testing, 125  
    specific performance characteristics, 114t  
    system coating schedule, 122–124  
    techniques, 111–112  
    touch up, 124  
    transparent, 111  
    workmanship, 119–120  
Fir, Douglas, 50, 495  
Fire codes, 390  
Fire rated doors, 241, 496  
Fire retardance, 77

Fire retardant coatings, 390  
Fire retardant treatment, 56, 112, 204, 496  
Fireplaces, 139  
Fire-rated doors, 251, 256  
First class workmanship, 29, 120, 149, 273, 303, 496  
Flake. *see* Fleck, ray  
Flakeboard. *see* Particleboard  
Flame retardant, 85  
Flame spread, 56t, 496  
Flame spread classifications, 55, 204, 496  
Flat grain, 496–497  
Flat slicing. *see* Plain slicing  
Flatness, 496  
Fleck, ray, 496  
Flitch, 496  
Flush door, 257, 267–268  
Flush inset, 496  
Flush inset door, 326  
Flush overlay, 496  
Flushness, 333  
    casework, 329  
Flute, 496  
Forming core, 74  
Fraction conversion, 404t  
Frame joinery, 141f  
Frameless construction, 288, 496  
French cleat, 496  
French dovetail joint, 292  
Fret, 425  
Fretwork, 425  
Frieze, 425  
Full extension, 290  
Furring, 496

## G

Gable, 496  
Gadroon, 425  
Gaps, 324, 333, 362, 496  
General contractor. *see* Contractor  
Glass, 153  
Glass shelves, 305  
Glazing. *see* Contractor  
Glides, 322  
Gloss. *see* Sheen  
Glue, 265  
    block, 496  
    spots, 496  
Glued, securely, 265, 496  
Gluing, 60–61, 66, 177  
Gothic arch, 425

## Grades

    compliance requirements, 27  
    countertops, 350  
    defined, 496  
    millwork, 145  
    stairwork and rails, 175  
Grading rules, 497  
Grain, 53, 111, 497  
Grain character, 497  
Grain figure, 497  
Grain raise. *see* Grain  
Grain slope, 497  
Grain sweep, 497  
Greek orders, 428  
Groin, 425  
Groove, 497  
Ground, 497  
Growth rings, 497  
Guarantee language, 22  
Guardrail  
    components, 174f  
    fabrication, 174f  
    joinery, 174f  
    nomenclature, 173f  
Guilloche, 425  
Gum pockets and streaks, 497

## H

Hairline, 497  
Half lap joint, 394f, 497  
Half round, 497  
Half round slicing, 498  
Hand rubbed finish, 498  
Handling, 41  
Handling marks, 498  
Handrails, 501  
    components, 174f  
    fabrication, 174f  
    joinery, 174f  
    nomenclature, 173f  
    patterns, 420f  
Hardboard  
    compliance requirements, 104  
    defined, 74, 498  
    tempered, 498  
Hardness, 498  
Hardwood, 46  
    compliance requirements, 60–65  
    defined, 498  
    material rules, 61–64  
    specific gravity/weight of, 391t–393t  
    veneer, 73–74

Hardwood veneer, 76  
 compliance requirements, 92–99  
 material rules, 91–99  
 species and cuts, 78t–80t  
 Haunch mortise and tenon joint, 292  
 Heartwood, 46–47, 53, 255, 498  
 Herringbone match, 83  
 Hickory, Pecan Group, 50  
 Hickory, True Group, 50  
 High density overlay, 85, 498  
 High pressure cabinet liner, 498  
 High pressure decorative laminates (HPDL), 85, 203  
 compliance requirements, 103  
 defined, 498  
 doors, 239  
 standing and running trim, 203  
 Hinges, 313–316  
 Historic restoration work, 350  
 acceptable requirements, 379  
 assembly rules, 380  
 compliance requirements, 33  
 installation, 382–383  
 product, 380–381  
 concealed surfaces, 378  
 contract documents, 379  
 contractor, 382  
 default stipulation, 380  
 exposed surfaces, 378  
 field finishing, 378  
 finishing rules, 381  
 grade, 379  
 industry practices, 379  
 installers, 382  
 machining rules, 380  
 material rules, 380  
 priming, 379  
 recommendations, 378  
 repair rules, 381  
 semi-exposed surfaces, 378  
 specifications, 378  
 stripping rules, 381  
 structural members, 378  
 typical inclusions/exclusions, 380  
 Hit-or-miss machining, 355  
 Hole, 498  
 Holes, worm, 498  
 Honeycomb, in Red Oak, 498  
 Honeycomb door core, 498  
 Hot melt laminates, 304  
 Hot press adhesive, 490  
 Housed cabinet back, 498  
 HPDL. *see* High pressure decorative laminates

(HPDL)  
 HPDL countertops, 342  
 assembly, 345  
 compliance requirements  
 assembly rules, 359–360  
 installation, 367–368  
 machining rules, 354  
 product, 352  
 configuration options, 345–347f  
 fabrication/installation of, 342–343  
 flame spread classifications, 345  
 mechanical tight joint faster, 347f  
 problems, causes and prevention, 344  
 blistering/bubbling, 344  
 cracking, 344  
 repeated heating, 344  
 separation of laminate, 344  
 warping, 344  
 white background paper, 345  
 Humidity, 37, 498  
**I**  
 Incised design, ornamental woodwork, 143  
 Inconspicuous, 498  
 Indentation, 498  
 Inlay, 426  
 Inner plies, 498  
 Installation, 42  
 Installer, 160, 183, 498  
 Intarsia, 426  
 Interior (building), 498  
 International Wood Products Association (IWPA), 22  
 Intumescent coatings, 498  
 Ionic order, 426, 428  
 Iron stain, 112  
**J**  
 Jamb, 141f  
 Janitor closet, 299  
 Joinery, 322  
 details, 394f–395f  
 Joints, 155–156  
 defined, 498  
 open, 498  
 Joints tight, factory, 498  
 Joints tight, field, 498  
**K**  
 Kerf, 499  
 Kerfed woodwork, 136  
 Kicks, 317–318  
 Kiln dried, 499

Knife cuts per inch (KCPI), 231, 274, 333, 499  
 Knife marks, 355, 499  
 Knife nicks, 355  
 Knocked down, 499  
 Knot, 499  
 conspicuous pin, 499  
 holes, 499  
 open, 499  
 sound tight, 499  
 spike, 499  
**L**  
 Lacquer, 113t–115t, 122, 499  
 Laminated, 177  
 Laminated plies woodwork, 136  
 Laminates, 85–86  
 chemical-resistant, 87  
 flame-spread rating, 87  
 metal-faced, 87  
 natural wood, 87  
 Lattice, 501  
 Leaf, 499  
 Leaf and dart molding, 426  
 Leaf hinges, 272  
 Leed, 499  
 Level of details, 25  
 Library cabinets (600 series), 483f–484f  
 Lifting, 499  
 Light valance, 305  
 Lights, 499  
 Linifold, 426  
 Lippage, 362, 499  
 Listing, 499  
 Lock block, 499  
 Lock joint, 499  
 Lock joint corners, 322  
 Lock miter joint, 395f  
 Lock shoulder joint, 395f  
 Loose side, 499  
 Louver, 499  
 Low pressure decorative laminates, 85  
 compliance requirements, 104  
 defined, 499  
 LPDL. *see* Low pressure decorative laminates  
 Lumber, 43–68, 74  
 adaptability for exterior use, 55  
 aesthetic characteristics, 53  
 availability, 54  
 compliance requirements  
 general, 58–59  
 product, 60–68  
 defined, 499  
 dimensional stability, 54–55



# INDEX

*f* = figure, *t* = table

door, 255  
engineered products, 53  
flame retardant, 56  
flame spread classification, 55  
hardwood, 46  
moisture content, 54–55  
preservative treatments, 55  
reclaimed timber, 52  
relative humidity, 54–55  
sawing methods, 53–54  
size limitations, 54  
softwood, 46  
specie descriptions, 49–52  
veneered construction, 54  
Luster. *see* Sheen

## M

Machine sanded, 504  
Made to order sequenced products, 499  
Mahogany, 499  
Mahogany, African, 50  
Makore, 50  
Manufactured defects, 149  
Manufacturer, 499  
Maple, Hard Group, 50  
Maple, Soft Group, 50  
Marquetry, 426  
Matching edgeband. *see* Self edge  
Material list, 28  
Measurement systems, 22  
Mechanical fastener, 495, 499  
Medium density fiberboard, 73, 499  
Medium density overlay, 85, 500  
    compliance requirements, 104  
Medium density particleboard, 500  
Medium-density fiberboard, compliance requirements, 105  
Medullary rays, 47, 500  
Melamine, 85, 500  
Member, 500  
Metal frame, 322  
Metal shelf standards, 321  
Metal sided drawer systems, 290  
Metamerism, 500  
Metopes, 426  
Mill run, 500  
Millimeter conversion, 404t  
Millwork, 127–165  
    applied moldings, 156  
    blinds, 142, 156  
    built up items, 156  
    built up moldings for larger profiles, 138  
    compliance requirements, 30, 145–165

    assembly rules, 155–159  
        general, 145–146  
        installation, 160–163  
        material rules, 149–155  
        product, 147–159  
        test, 164–165  
    concealed surfaces, 148  
    contract documents, 145  
    cutouts, 149  
    design and use of resources, 132  
    design ideas, 144  
    door frames, 156  
    exposed surfaces, 145, 148  
    first class workmanship, 149  
    flat surfaces, 132  
    gluing, 149  
    grades, 145  
    joints at assembled woodwork, 155  
    miter joints and caps, 156  
    molded surfaces, 132  
    ornamental woodwork, 142–144, 156  
    production methods, 132  
    radius moldings, 136  
    rail, 133f, 135f  
    running trim, 133f–135f, 156  
    sash, 156  
    screens, 142, 156  
    semi-exposed surfaces, 145, 148  
    sheet products, 156  
    shutters, 156  
    solid lumber paneling patterns, 137  
    specifications, 144  
    standing, 156  
    standing trim, 133f–135f  
    stile and rail assemblies, 156  
    thermal integrity, 141f  
    typical inclusions/exclusions, 148  
    window frames, 156  
Miter joints, 182  
Mineral streak, 500  
Mirror polish finish, 500  
Mismatch, 500  
Miter  
    lock joint, 500  
    shoulder joint, 500  
Miter joint, 293, 395f, 500  
Mitered outside corners, 224  
Miterfold, 355, 500  
Mixed grain, 497  
Mock up, 29, 500  
Modillions, 426  
Modular casework, 500  
Modulus of elasticity, 500

Modulus of rupture, 500  
Moisture, 20, 37–40  
Moisture content, 38–40, 38f, 38t, 500  
    compliance requirements, 41–42  
Moisture resistant MDF, 73  
Molded edge, 500  
Molding, 500  
    astragal, 500  
    back band, 500  
    base, 500  
    base block, 500  
    base cap, 500  
    base shoe, 500  
    baseboard, 500  
    bead molding, 500  
    bed molding, 500  
    casing, 500  
    chair rails, 500  
    cornice, 500  
    cove, 500  
    crown, 500  
    fillet, 500  
    handrails, 501  
    lattice, 501  
    ogee, 501  
    panel molding, 501  
    quarter round, 501  
    shoe, 501  
    transition molding, 501  
Mortise and tenon joint, 292, 394f  
    blind joint, 501  
    slotted joint, 501  
    stub joint, 501  
    through joint, 501  
Mottle, 501  
Movable cabinets (700 series), 485f–488f  
Movable slats, 155  
Moveable cabinets, 322  
Mullions, 246  
Muntins, 247  
Mutule, 426

## N

Nailed, 501  
Natural, 501  
Natural defects, 149  
Natural stone, 105  
Natural/engineered stone countertops, 348, 350, 352, 356, 362–363, 369  
Newel post, 501  
NFPA 80, 251  
Nominal, 501  
Non climate controlled, 501



Non grain raising stains, 501  
 Non housed cabinet back, 501  
 Non wood, 501  
 Non wood based products, 501  
 Non wood to non wood, 501  
 Nosing, 501

## O

Oak, English Brown, 51  
 Oak, Red, 51  
 Oak, White, 51  
 Occasional, 501  
 Ogee, 501  
 Opaque finish  
   casework, 305–306  
   defined, 501  
   lumber, 63, 66  
   millwork, 150  
   stairwork and rails, 177  
   stile and rail door, 263  
   wall/ceiling surfacings and partitions, 190  
 Open grain, 53, 493, 497  
 Open joints, 498  
 Orange peel, 501  
 Order, 426  
 Oriented strand board, 501  
 Ornamental woodwork, 142–144, 155, 158  
 Over filling, 501  
 Overlap, 179, 501  
 Overlay, 83–86, 288, 297, 324, 501  
 Overspray, 501  
 Ovolo, 426  
 Oxidation, 19, 37, 47, 77, 502

## P

Pair match, 256, 502  
 Panel, 502  
 Panel adhesives, 77  
 Panel match, 502  
 Panel molding, 501  
 Panel molding patterns, 416f  
 Paneled door details, 293  
 Panels, 73  
 Parquet match, 84  
 Particleboard, 73, 493  
   compliance requirements, 105  
   defined, 502  
   fire retardant, 73, 502  
   industrial, 73  
   moisture resistant, 73  
 Partition, 502  
 Patch, 502  
 Pearl molding, 426

Pecky, 502  
 Pediment, 426, 502  
 Pellet molding, 426  
 Penetrating oil, 502  
 Performance based, 502  
 Phenol formaldehyde resin, 502  
 Philippine mahogany, 60  
 Photodegradation, 47, 77, 502  
 Picture mold patterns, 412f  
 Pierced design, ornamental woodwork, 143  
 Pilaster, 426, 502  
 Pin holes, 502  
 Pine, Eastern White, 51  
 Pine, Southern Yellow, 51  
 Pine, Sugar, 51  
 Pitch, 502  
 Pitch pocket, 502  
 Pitch streak, 502  
 Pith, 502  
 Plain sawing, 53, 502  
 Plain slicing, 77, 502  
 Plain stripe, 506  
 Planing, 132  
 Plank, 502  
 Plant on back, 502  
 Plastic laminate finish. *see* High pressure decorative laminates (HPDL)  
 Pleasing matched, 503  
 Plinth, 426  
 Plow, 503  
 Plowed in joint, 394f  
 Ply, 503  
 Plywood, 73  
   defined, 503  
   panel types, 76f  
 Pocket door hardware, 303  
 Pocket screw, 503  
 Pocket screw joint, 292f, 394f  
 Polyester, 85, 113t–115t, 123–124, 503  
 Polyurethane, 113t–115t, 123–124, 503  
 Polyvinyl chloride edging, 503  
 Polyvinyl chloride (PVC), 503  
 Poplar, Yellow, 51  
 Poppyhead, 426  
 Prefinished, 503  
 Prefinished panels, 110  
 Premanufactured sets, 503  
 Premium grade, 145, 175, 289, 295, 350, 503  
 Prescriptive based, 503  
 Preservative, 55, 390, 503  
 Pressed, 503  
 Profile, 503  
 Pullout shelves, 321

Purchase order, 503  
 PVA, 503

## Q

Quarter round, 501  
 Quarter sawing, 54, 503  
 Quarter slicing, 77, 503  
 Quartered grain, 497  
 Quartered lumber, 503  
 Quarters, 503  
 Quatrefoil, 426  
 Quirk, 426, 503

## R

Rabbet, 503  
 Rabbet joint, 395f, 503  
 Radius moldings, 136, 176  
 Radius woodwork, 149–150, 177  
 Rail, 133f, 135f, 246, 503  
 Railing, 503  
 Raindrop stripe, 506  
 Raised grain, 497  
 Raised panel, 503  
 Random matching, 81, 503  
 Ray, 503  
 Reclaimed timber, 52  
 Reconstituted veneer, 76, 504  
 Reconstituted wood, 58  
 Red birch, 504  
 Red/brown, 504  
 Redwood, 52  
 Reed, 426  
 Reeding, 426  
 Refacing, 403  
 Reference source directory/listings, 387–389  
 Refinishing, 37, 403  
 Refurbishing, 403  
 Reglet, 426  
 Relative humidity, 38–40, 38f, 38t  
 compliance requirements, 41–42  
 Relief, ornamental woodwork, 143  
 Restrained. *see* Captured  
 Retention profiles, 289  
 Reveal, 324  
 Reveal joints, 222, 224  
 Reveal overlay, 504  
 Reverse box match, 83  
 Reverse diamond match, 84  
 Ribbon stripe, 506  
 Rift cut, 504  
 Rift sawing, 54  
 Rift slicing, 78  
 Ring, annual growth, 504



# INDEX

*f* = figure, *t* = table

- Riser, 179, 504  
Roey, 507  
Romanesque, 427  
Room match, 504  
Rope molding, 426  
Rosette, 427  
Rotary slicing, 78, 504  
Rough cut, 504  
Roundel, 426  
Running match, 82, 196f, 504  
Running trim, 133f–135f, 154, 176  
    design examples, 409f–422f  
    guidelines, 21  
    wall/ceiling surfacings and partitions, 203  
Runs, 504  
Ruptured grain, 504
- S**
- S4S (surfaced four sides), 504  
Sags, 504  
Samples, 29  
Sand through, 504  
Sanding  
    casework, 333  
    cross sanded, 504  
    door, 274  
    finishing, 111–112, 121  
    machine sanded, 504  
    smoothly sanded, 504  
    stairwork and rails, 187  
    wall/ceiling surfacings and partitions, 231  
Sapwood, 47, 53, 121, 255, 505  
Sash, 151, 154, 158, 505  
Sash joinery, 141f  
Sawing  
    lumber, 53–54  
    millwork, 132  
Scarf joint, 394f, 505  
Scheduling, 25  
SCL. see Structural composite lumber  
Scotia, 427  
Screens, 142, 152, 154–155, 158  
Scribe, 505  
Scribing, 232, 329–330, 356, 505  
Sculpture, ornamental woodwork, 143  
Sealants, 230  
Sealers, 505  
Sealing, 505  
Seasoning, 505  
Securely attached, 505  
Securely fastened or bonded, 505  
Security panels, 326  
Seismic fabrication/installation requirements, 390  
Seismic requirements, compliance to, 285  
Select, 505  
Self edge, 505  
Semi-exposed surfaces, 151, 505  
Set match, 256, 505  
Shading, 505  
Shaft, 427  
Shake, 505  
Sharp contrast, 505  
Sheen, 505  
Sheen testing, 125  
Sheet products, 69–106  
    assembly rules, 158  
    compliance requirements, 89–107, 149  
    core materials, 73–75  
    door, 255  
    laminates, 85–86  
    overlays, 85–86  
    panel types, 73–75  
    plywood, 73  
    prefinished panels, 85–86  
    specialty, 77  
    wood veneers, 76–81  
Shelf cleat, 505  
Shelf deflection, 291, 505  
Shelf load, 291, 505  
Shelf load test, 402  
Shelf rests, 303  
Shelf test unit, 398  
Shellac, 505  
Shelves, 318  
    adjustable, 318–321  
    fixed, 318  
    metal, 321  
    pullout, 321  
Shoe, 501  
Shop drawings, 25, 505  
Shoulder mitered joint, 292f, 395f  
Shutters, 152, 155  
Side-matched joints, 231  
Sink tops, 353  
Skin, 505  
Skirt board, 505  
Slash grain, 496–497  
Slats, 155  
Sleepers, 317–318, 505  
Sliced. see Veneer, sliced  
Sliding doors, 316  
Slight, 505  
Slip matching, 81, 505  
Slotted mortise and tenon joint, 394f  
Slow through, 505  
Smoke developed index, 56t  
Smooth, tight cut, 505  
Smoothness, 505  
Soffitt, 177, 323, 330, 427  
Soft conversion, 505  
Softwood, 46, 506  
    compliance requirements, 66–68  
    material rules, 66  
    veneer, 73–74  
Softwood veneer, 76  
    compliance requirements, 100–102  
    material rules, 100–102  
Solid machined woodwork, 136, 154  
Solid phenolic, 506  
Solid phenolic core, 74  
Solid phenolic countertops, 348, 350, 352, 354, 356, 361, 369  
Solid phenolic laminates, 86  
    casework, 326  
    compliance requirements, 106  
Solid stock, 506  
Solid surface, 106, 506  
Solid surface countertops, 347, 350, 352, 354–355, 360, 368  
Sound, 506  
Sound resistant doors, 241, 256  
SP. see Solid phenolic  
Spandrel, 506  
Spandrel panel, 177  
Special base casework heights, 469  
Species, 506  
Specific gravity, 391t–393t, 506  
Specification, 506  
Spine joint, 506  
Spline, 506  
Spline joint, 293, 394f  
Splined miter joint, 395f  
Split, 506  
Split heart, 506  
Sponsor Associations, 22  
Stain, 506  
Stain resistance, 396–397  
Staining, 506  
Stairwork, 506  
Stairwork and rails, 179  
    advisory, 172  
    assembly rules, 181–183  
    compliance requirements  
        assembly rules, 181–182  
        general, 175  
        installation, 183–187  
        machining rules, 179–181  
        material rules, 177–179  
        product, 176–182  
        test, 187–188

<p>concealed surfaces, 175–176  contract documents, 172, 175  cross grain, 172  curved member, 172  custom designed stairs, 172  design, 172  designer, 172  edges, 172  exposed surfaces, 175–176  flame spread classifications, 176  grades, 175  industry practices, 175  machining rules, 179–181  material rules, 177–179  nomenclature, 173f  ornamental details, 176  recommendations, 174  run and riser dimension points, 172  sheet products, 176  solid wood edges, 175  specification, 174  stair runs, 172f–173f  typical stair runs, 172</p> <p>Standard extension, 290</p> <p>Standing trim  defined, 506  design examples, 409f–422f  guidelines, 21  millwork, 133f–135f, 154, 157  stairwork and rails, 176  wall/ceiling surfacings and partitions, 203</p> <p>Stapled, 506</p> <p>Static load capacity, 290</p> <p>Stationary slats, 155</p> <p>Stave, 493</p> <p>Staved core, 506</p> <p>Sticking, 506</p> <p>Stile and rail construction, 506</p> <p>Stile and rail door, 246–247  assembly rules, 315  components, 246–247  construction, 248f  design, 247  design examples, 436f–439f  grain direction and layout, 247, 248f  joinery, 247  machine/assembly rules, 268–269  thickness, 247</p> <p>Stile and rail panel, construction, 249f</p> <p>Stiles, 246</p> <p>Stiles and vertical edges, 506</p> <p>Stop dado, 293</p> <p>Stopped joint, 494</p>	<p>Stops, 506</p> <p>Streaks, mineral, 506</p> <p>Stretchers, 317, 326, 506</p> <p>Stringer, 179, 506</p> <p>Stringer turnout, 506</p> <p>Stripes, 506–507  broken stripe, 506  plain stripe, 506  raindrop, 506  ribbon stripe, 506  roey, 507</p> <p>Stripping, 507</p> <p>Structural composite lumber, 507</p> <p>Structural integrity test, 399–400</p> <p>Structured composite lumber, 53</p> <p>Stub mortise and tenon joint, 394f</p> <p>Stub tenon, 292</p> <p>Stylobate, 427</p> <p>Sub front, 507</p> <p>Submersion test, 400</p> <p>Submittals, 23–33  compliance requirements, 25, 27  general, 27  product, 27–33  introductory information, 25–26</p> <p>Subtop, 507</p> <p>Sunburst match, 83</p> <p>Surface bearing head, 507</p> <p>Surface check, 507</p> <p>Surfaced four sides (S4S), 504</p> <p>Swing match, 84</p> <p>Swirl, 507</p> <p>Synthetic penetrating oil, 113t–115t</p> <p>Systems of measurement, 22</p> <p><b>T</b></p> <p>Table structural integrity test, 402</p> <p>Table test unit, 398</p> <p>Tall storage cabinets (400 series), 477–480f</p> <p>Tambour, 507</p> <p>Teak, 52</p> <p>Tear-outs, 355</p> <p>Telegraph/telegraphing, 145, 507</p> <p>Tenon, 507</p> <p>Tenon joint, 292</p> <p>Texture, 507</p> <p>Thermally fused decorative laminate panel, 507</p> <p>Thermoplastic sheet, 85</p> <p>Thick phenolic. <i>see</i> Solid phenolic</p> <p>Through dado, 293</p> <p>Tight, 507</p> <p>Tight side, 507</p> <p>Timber, reclaimed, 52</p>	<p>Title sheet, 28</p> <p>Toe bases, 317–318</p> <p>Tolerances, 19  casework, 323–325</p> <p>Tongue, 507</p> <p>Tongue and groove joint, 394f, 507</p> <p>Top flat surface, 507</p> <p>Topcoat, 507</p> <p>Tori, 427</p> <p>Torn grain, 507</p> <p>Torsion test, 399</p> <p>Torus, 427</p> <p>Touch up, 124</p> <p>Trabeated, 427</p> <p>Tracery, 427</p> <p>Transition molding, 501</p> <p>Transparent finishes  casework, 306  defined, 507  hardwood, 63  lumber, 58  millwork, 150  softwood, 66  stairwork and rails, 176–177, 179  stile and rail door, 263  veneer, 305  wall/ceiling surfacings and partitions, 190</p> <p>Tread, 507</p> <p>Tread return, 507</p> <p>Treenail, 427</p> <p>Trefoil, 427</p> <p>Triglyph, 427</p> <p>Tuscan order, 427</p> <p>Tuss, 428</p> <p>Twist, 325, 507–508</p> <p><b>U</b></p> <p>Urea formaldehyde resin, 507</p> <p>Utility room cabinets, 299</p> <p>Utility shelving, 152–153</p> <p><b>V</b></p> <p>V book match, 83</p> <p>V grooved, 507</p> <p>Varnish, 113t–115t, 122–123, 507</p> <p>Veneer, 73–74, 507  cutting, 77–78  reconstituted, 76, 504  rift cut, 507  rotary cut, 508  sliced, 508</p> <p>Veneer core, 507</p> <p>Veneer faces, 241</p>
---	---	--



# INDEX

*f* = figure, *t* = table

- Veneer grain match, 494, 507  
Veneer joints, 222  
Veneer lamination, 178  
Veneer loss, 223  
Veneered profile, 149  
Ventilation, 121  
Verge board, 427  
Vertical grain, 495, 508  
Vine mark, 508  
Vinyl, 508  
Vinyl films, 85  
    compliance requirements, 104  
Vinyl lacquer, 113t–115t, 122–123, 508  
Viscosity, 508  
Volutes, 427, 508  
Voussoir, 427
- W**
- Waferboard, 508  
Wainscot, 508  
Wall anchorage, 330–331  
Wall cabinet  
    structural integrity test, 400  
    test unit, 398  
Wall hung cabinets (300 series), 475f–476f  
Wall hung countertops, 358  
Wall surfacing, 21  
Wall trims, 140f  
Wall/ceiling surfacings and partitions, 21, 182  
    aesthetics, 226  
    compliance requirements, 31  
        assembly rules, 220–224  
        general, 212–213  
        installation, 225–230  
        machining rules, 219–220  
        material rules, 216–220  
        product, 214–224  
        test, 231–232  
    concealed surfaces, 212  
    contract documents, 195, 212  
    decorative laminate, 222–223, 230  
    default stipulation, 214  
    edgebranding, 205f  
    expansion joint, 228  
    factory-prepared corner and transition, 206f  
    fastening, 228  
    field-cut corner and transition, 205f  
    finishing, 204  
    fire retardant treatment, 204  
    flat paneling with reveals within niche, 209f  
    flushness, 227  
    flushness at adjoining panels, 228  
    gaps, 226–227  
    grades, 212  
    high pressure decorative laminates, 203  
    industry practices, 212–213  
    installation, 204  
    joints at assembled woodwork, 220–221  
    opaque finishes, 195  
    panel sequencing, 196f–197f  
    paneling for reception walls with factory built structures, 210f  
    recommendations, 211  
    repairs, 226  
    reveal strips, 228  
    reveals and reveal joint, 205f–206f  
    reveals at adjoining panels, 227  
    sequencing of panels within room, 197–202  
    smoothness of flat and molded surfaces, 204  
    solid phenolic, 230  
    solid stile and rail wood, 223  
    solid surface, 223, 230  
    solid wood surfacing, 230  
    specifications, 211  
    stile and rail paneling, 208f  
    transparent finishes, 195, 226  
    typical inclusions/exclusions, 214  
    variations in natural wood products, 203  
    veneered panels, 229  
    wall panels with millwork, 207f  
    wood veneers, 222  
    woodwork, 226  
Walls surfacing and partitions, compliance requirements, 31  
Walnut, American Black, 52  
Wane, 508  
Wardrobe cabinets (500 series), 481f–482f  
Wardrobes, 321  
Warp, 149, 177, 325  
    bow, 508  
    crook, 508  
    cup, 508  
    defined, 508  
    twist, 508  
Warping, 344  
Warranty, 252–253  
Warranty language, 22  
Wash coat, 111–112, 508  
Water repellent, 390, 508  
Well matched for color and grain, 508  
White, 508  
White birch, 508  
Window frames, 151, 157  
Window sash, 141f  
Windows, 508  
    built up moldings, 139  
Wiping stains, 508  
Wood, 19  
    engineered, 58  
    fire retardant, 56  
    as plant, 46  
    reconstituted, 58  
Wood based products, 508  
Wood block, lined, 493  
Wood casework, 325–326  
Wood countertops, 348–349, 352–353, 358–359  
Wood filler, 508  
Wood flush door, 508  
Wood panels, prefinished, 110  
Wood products, variations, 19  
Wood species, comparative values, 48t  
Wood to non wood, 508  
Wood to wood, 508  
Wood veneers, 76  
    adjacent leaves, matching, 81  
    specialty/sketch matches, 83–84  
    wall/ceiling surfacings and partitions, 222–223  
Woodwork. see Architectural woodwork  
Woodwork Institute (WI), 21  
Woodworker. see Manufacturer  
Workmanship. see First class workmanship  
Worm track, 509  
Wormholes, 509  
Wraparound hinge, 291  
Writing/utility shelves, 321
- X**
- X-ray doors, 241, 256