Stacking & Folding Chairs

Q1. What is the difference between a stacking chair and a nesting chair?

A: Stacking chairs are designed to stack vertically on top of each other — one chair sits directly on top of another. Commercial stack chairs typically stack 8–20 high, with the exact count limited by stability and the practical height a person can safely retrieve from. Stacking is the most space-efficient storage format: a stack of 20 chairs occupies the same floor footprint as a single chair. This makes stack chairs the dominant choice for high-quantity storage applications such as banquet halls, conference centers, and large training rooms. Nesting chairs are designed with a frame geometry that allows multiple chairs to roll or slide into each other in a side-by-side configuration, usually on wheeled legs or casters, reducing the row's depth as chairs are added. Nesting chairs are stored in a compact row rather than a vertical stack — they do not stack on top of each other. They are preferred in environments where vertical stacking is impractical or undesirable, or where the chairs need to be moved as a group on their wheels. The practical choice depends on storage constraints and the frequency of setup and teardown. If your primary goal is to store the maximum number of chairs in the minimum floor area, stack chairs are more efficient — 20 stacked chairs occupy roughly 2 square feet. If your goal is to move multiple chairs simultaneously without a dolly, nesting chairs on wheels can be rolled as a group. Many commercial environments use both types for different applications.

Q2. How many stacking chairs can be safely stacked?

A: The safe stacking height for commercial stack chairs depends on the chair's design and the manufacturer's specification. Most commercial stack chairs are rated to stack 10–15 high in a freestanding stack; some heavy-duty steel frame chairs can stack 18–20 high. The practical limitation is the height and stability of the stack — a 20-high stack of chairs reaches approximately 6'–7' in height and becomes progressively less stable as stack height increases, particularly on uneven floors. For stacks above 10 chairs, a stacking cart (dolly) is strongly recommended. Stacking carts are wheeled metal frames that support and stabilize the stack, keep it at a controlled height, and allow the entire stack to be rolled to storage rather than carried chair by chair. Most commercial stack chair manufacturers offer matching carts rated for the specific chair's stacking geometry. Using a chair cart also protects floors from scratching during stacking operations and reduces the ergonomic stress on staff performing setup and teardown. Never exceed the manufacturer's stated maximum stack height. The stackable features of commercial chairs — interlocking legs, self-centering geometry, protective glides — are designed for a specific maximum stack count. Exceeding this count creates unstable stacks that can tip and cause injury. In environments where chairs are stacked and unstacked multiple times per week, follow the manufacturer's stacking instructions precisely and post the maximum stack count in the storage area.

Q3. What weight capacity should stacking chairs have?

A: Standard commercial stacking chairs are rated for 250–300 lbs per chair. For general office, training room, and meeting applications where the user population is typical office employees and guests, a 250 lb rating is adequate. For applications where the user population includes a broader weight range — banquet halls, event venues, churches, or any public-facing space — specifying chairs rated for 300 lbs or more is a conservative and appropriate choice. Heavy-duty stacking chairs rated for 350–500 lbs are available for applications requiring higher weight capacity, such as large-body conferences, healthcare waiting rooms, or general public venues. These chairs use heavier-gauge steel frames, stronger welds, and higher-capacity seats. They often stack fewer high than standard chairs — typically 8–12 — due to the increased weight per unit and the heavier frame geometry. BIFMA testing is the applicable standard for commercial stacking chairs. BIFMA X5.1 for seating covers structural integrity, stability, fatigue testing, and weight capacity for standard office chairs; BIFMA X5.4 covers auditorium and public seating, which is applicable for stacking chairs used in large-audience venues. Verify which standard applies to the chairs you are purchasing and confirm the chairs have been tested under the applicable specification.

Q4. What frame material is best for commercial stacking chairs?

A: Steel tube frames are the most common and most durable construction for commercial stacking chairs. Steel frames are available in several gauges — heavier gauge (18-gauge or thicker) is more durable than lighter gauge (22-gauge or thinner). Commercial-grade steel frames are welded at all structural joints rather than using mechanical fasteners that can loosen over time. Powder-coat finish protects the steel from rust and is available in a wide range of colors. Steel frames support the highest weight capacities and have the longest service lives under multi-shift use. Polypropylene (plastic) one-piece shells on steel or aluminum legs are the most common configuration for mid-range stacking chairs. The plastic shell integrates the seat and back into a single molded unit that is impact-resistant, lightweight, easy to clean, and available in a wide range of colors. Shell thickness and polymer quality vary significantly between manufacturers — commercial-grade shells use high-impact polypropylene with a minimum wall thickness of 3mm; budget chairs use thinner shells that crack under sustained load or impact. Aluminum frame stacking chairs are lighter than steel alternatives and rust-proof — appropriate for outdoor use or environments requiring frequent chair movement by one person. Aluminum's lower density makes individual chairs lighter (typically 6–9 lbs versus 10–14 lbs for steel), which reduces fatigue for staff who set up and tear down large quantities of chairs multiple times per week. The trade-off is that aluminum frame chairs typically cost more than equivalent steel frame chairs.

Q5. Do stacking chairs need to be upholstered or can they be all plastic?

A: The choice between upholstered and all-plastic stacking chairs depends on the intended use duration and the environment. For short-duration seating — auditorium presentations, training sessions up to two hours, banquet events — molded plastic or polypropylene shell chairs without upholstery are entirely adequate. Modern commercial plastic shell chairs are contoured to provide appropriate support for typical event durations and are far more durable and maintainable than upholstered alternatives in high-use public environments. For longer-duration seating — training rooms where sessions last 4–8 hours, conference rooms where chairs are used all day, or meeting rooms — a padded seat (and optionally padded back) improves comfort meaningfully. Upholstered seat pads on commercial stacking chairs use commercial-grade fabric with minimum 100,000 double rubs; foam density should be 2.0 lb/ft³ or higher for sustained use durability. Fully upholstered stacking chairs (padded seat and back) are appropriate for conference room and executive meeting applications where the chair will be occupied for extended periods. Upholstered stacking chairs require more attention to maintenance than all-plastic chairs. Fabric upholstery absorbs spills and body oils, which can stain and create hygiene concerns in food service or high-traffic public environments. For cafeterias, break rooms, and public-facing venues where food and beverages are consumed, all-plastic or vinyl-upholstered stacking chairs are the most appropriate choice. For office training rooms and conference spaces, fabric upholstery is practical.

Q6. What are ganging connectors on stacking chairs and do I need them?

A: Ganging connectors are small plastic or metal hardware pieces that attach to the outer side of chair frames, allowing adjacent chairs in a row to be linked together. Linked chairs maintain consistent spacing, prevent individual chairs from being pulled out of alignment during a presentation or meeting, and allow a row to be moved as a single unit during setup or teardown. Ganging connectors are a standard feature on commercial stacking chairs intended for auditorium-style, training room, or seminar use. For event seating where rows of chairs must maintain organized alignment — such as training sessions, lectures, or presentations — ganging connectors are a practical feature that saves setup time and maintains a professional appearance. Without ganging, chairs in a row slowly migrate out of alignment as people shift in their seats, creating uneven gaps and a disorganized appearance. With ganging, the connected row maintains consistent spacing for the duration of the event. Ganging connectors are unnecessary for applications where chairs will be used in random positions — around a table, in casual conversation groupings, or in a cafeteria where users position chairs individually. For these applications, ganging connectors may actually be inconvenient if users need to move a single chair without disengaging the connector. Before specifying ganging connectors, confirm the intended use pattern: if the chairs will primarily be used in organized rows, specify ganging; if they will primarily be used in flexible arrangements, ganging connectors add complexity without benefit.

Q7. What floor protection do stacking chairs need?

A: Stacking chair leg tips — the glides or feet at the bottom of each leg — must be appropriate for the floor surface. For hard floors (hardwood, tile, laminate, polished concrete), leg tips must be soft enough to prevent scratching. Felt pads are the most scratch-protective but wear out within 6–12 months under regular use. Rubber leg tips last longer and provide scratch protection adequate for most hard floor surfaces. Avoid hard plastic leg tips on hard floors — they produce noise, provide no floor protection, and create marking under the concentrated point load of a chair leg. For carpet, hard rubber or harder plastic glides are appropriate — the carpet pile provides its own scratch protection, and softer glide materials drag through the pile rather than rolling smoothly. Chairs used on both hard floor and carpet benefit from dual-surface compatible glides, which are available from most commercial chair manufacturers. When stacking chairs on a dolly or cart for storage, verify that the cart's casters are appropriate for the floor surface in the storage area. Stacking carts loaded with 15–20 chairs can weigh 200–300 lbs, concentrating significant load on each caster. Hard floor storage areas require soft-compound casters; carpet storage areas require harder compound casters. Overloaded casters dragged across the wrong floor surface cause significant scratching and floor damage.

Q8. Can stacking chairs be used outdoors?

A: Most standard commercial stacking chairs are designed for indoor use. Steel frames without specialized coatings will rust with outdoor exposure; standard powder-coat finishes provide limited protection in repeated wet conditions. Polypropylene plastic shells are UV-sensitive and will yellow, chalk, and become brittle with prolonged sun exposure. Fabric upholstery is not rated for weather exposure. Stacking chairs designed for outdoor use are specifically constructed with weather-resistant materials: powder-coated aluminum frames (rust-proof) or steel with marine-grade galvanizing, UV-stabilized polypropylene shells, and if upholstered, outdoor-rated fabrics treated with water-repellent and UV-resistant coatings. These chairs cost more than indoor equivalents but are necessary for any seating that will be used or stored outdoors regularly. If indoor stacking chairs must occasionally be used in a covered outdoor space — a covered patio, a tent event — they can typically tolerate brief outdoor use if they are brought inside promptly and not left outdoors in wet conditions. The key risk is moisture infiltration into hollow steel frame tubes, which causes internal rust that is not visible until the tube fails structurally. For regular or prolonged outdoor use, specify outdoor-rated chairs.

Q9. How do I transport and store a large quantity of stacking chairs?

A: Stacking carts are the standard tool for transporting large quantities of commercial stack chairs. A stacking cart holds 15–25 chairs in a stable vertical stack on a wheeled metal frame that can be rolled to the storage location. Carts are typically specific to the chair model or frame geometry — verify that the cart is rated for the specific chair you are purchasing. Using chairs without a matching cart requires carrying each chair individually, which is time-consuming and physically demanding for staff. For very large quantities — 50 chairs or more — a flat-platform storage cart or "A-frame" horizontal storage rack may be more practical than individual stacking carts. These systems stack chairs horizontally (on their sides) rather than vertically, which can achieve higher storage density in low-ceiling storage rooms. The trade-off is slightly more handling complexity during setup and teardown. Storage room planning for stacking chairs must account for the full loaded footprint of the storage cart plus a minimum 36" aisle on at least one side for safe access and retrieval. Loaded stacking carts should not be stored on inclines without wheel locks engaged. Store stacking chair carts away from high-traffic areas to prevent accidental collision with the stack, which can cause the stack to topple.

Q10. What is the expected service life of commercial stacking chairs?

A: Commercial-grade stacking chairs with steel or aluminum frames and commercial-grade seats, used in typical event and meeting applications, have a service life of 10–15 years. The frame is the most durable component — a well-welded steel frame will outlast all other components. The limiting components are: the seat foam (which compresses over time under sustained use, especially with heavy users), the upholstery fabric (which accumulates soiling and abrasion wear), and the leg tips (which wear or fall off under regular use). Service life is significantly reduced in high-intensity environments: chairs set up and torn down multiple times per day, chairs used in outdoor or semi-outdoor environments without weatherproof construction, or chairs used in food service environments with aggressive cleaning. For high-intensity applications, budget for a 7–10 year service life and factor replacement cost into the total cost of ownership when comparing models. Extending service life through maintenance involves: replacing worn or missing leg glides annually (inexpensive and prevents floor damage and leg deformation from direct metal-to-floor contact), cleaning fabric upholstery on a defined schedule, and inspecting weld joints at the frame-to-seat connection annually for any signs of cracking or loosening. Chairs with any structural failure — cracked welds, bent frames, broken mounting hardware — should be removed from service immediately and repaired or replaced. Download PDF Buyer's Guide PDF Shop Stacking & Folding Chairs Talk to an Expert 1.800.460.0858 Monday – Friday, 7am to 6pm CT