Step-by-Step Guide for Building DIY Computer Desk

Tools & Materials Required

Category	Materials
Building Materials	18mm thick MDF sheets, Hardwood (ash) for desktop, Glass (double-glazed, toughened), Elastic cords, Black tack for sealing, Wood glue, Wood filler, Screws, Threaded inserts
Tools	Measuring tape, Drill and drill bits, Screwdriver, Palm sander (or sandpaper), Clamps, Pencil for marking, Scissors, Basic woodworking tools, Paint brushes, Protective gear (breathing mask, goggles)
Finishing Materials	MDF primer, Oil-based undercoat, Gloss spray paint, Wood oil for desktop, Carbon fiber vinyl wrap
PC Components	Motherboard, Graphics card, Power supply, Hard drives, RAM, Processor, Water cooling parts (pump, radiators, tubing), Fans, Power strip

Stepwise Process for Building

1. Prepare The Base

- Cut MDF to size for the main compartment
- Make cutouts for connector panels
- Drill holes for component mounting
- Install threaded inserts
- Sand all pieces smooth

2. Build The Main Chamber

- Assemble side pieces with screws and glue
- Fill screw holes with wood filler
- Sand until smooth
- Apply MDF primer (2 coats)
- Add oil-based undercoat
- Sand again
- Apply final gloss coat

3. Create Side Units

- Build separate units for radiators
- Add support braces
- Install hinges
- Paint to match the main unit
- Bolt to the main chamber

4. Install Components

- Mount power supply
- Set up a water cooling system
- Install motherboard
- Add graphics card
- Connect all water-cooling tubes
- Mount radiators inside units
- Install hard drives
- Add RAM

5. Finish The Build

- Make the hardwood top
- Install glass panel
- Add sealing elements
- Mount to wall
- Test all systems