

Technical Recommendations (Design & Structure)

1 Structural System

- Use **hot-dip galvanized steel structure (mandatory)**
- Structure must carry:
 - Roof tiles load
 - Aluminum frames load
 - Alucobond panels load
 - Wind pressure (very important for closed outdoor rooms)

✓ Recommended:

- Hollow steel sections (galvanized)
- Proper anchoring to main building

2 Wall System (Alucobond Cladding)

- Use **ACP (Alucobond panels)** fixed on:
 - Aluminum subframe system
- Provide:
 - Air gap between wall and panels (ventilated façade)
- Use proper:
 - Joint sealants
 - Expansion joints

✓ Important:

Alucobond is not waterproof alone → must have backing protection

3 Aluminum Windows & Doors

- Use high-quality **aluminum systems (preferably thermal break)**
- Must be:

- Airtight
- Watertight
- Install with:
 - EPDM gaskets
 - PU sealant

✓ Critical:

Integration between:

👉 Roof + aluminum + Alucobond must be perfectly sealed

📐 4 Roof Slope

- Minimum: 25°
- Recommended: 30°–35°

✓ Ensures:

- Proper drainage
- No leakage risk
- Better durability

🏠 5 Roof System Layers

1. Galvanized steel structure
2. Vapor barrier
3. Thermal insulation (rock wool or rigid foam)
4. Waterproof membrane
5. Battens (treated or galvanized)
6. Roof tiles
7. Ridge caps + flashing systems

6 Thermal & Comfort Performance

- Install insulation (5–10 cm minimum)
- Use thermal break aluminum
- Provide shading if needed

✓ Result:

- Comfortable indoor environment
 - Reduced heat gain
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7 Drainage System

- Install **gutters (visible or hidden)**
- Proper slope: 1–2%
- Water must not reach:
 - Aluminum frames
 - Alucobond joints

