RANGE HOOD FIELD MEASUREMENT & INSTALLATION GUIDE

ARCHITECTURAL STONE & CAST CONCRETE RANGE HOOD SPECIFICATION MANUAL

01. PROJECT & SITE SPECIFICATIONS

DATE:
PROJECT NAME:
ARCHITECT / CONTRACTOR:
INSTALLER / TECH:

CLIENT / OWNER:
SITE ADDRESS:
PHONE / CONTACT:
CABINET SUPPLIER:

02. HOOD DESIGN, VENTILATION & ARCHITECTURAL SEQUENCING

RANGE HOOD PROFILE & DUCTING

Straight Canopy Tapered/Sloped Curved/Arch
Chimney to Ceiling Soffit Extension

HOOD FINISH

Smooth Textured Plaster

COLOR SELECTION _____

1. WHY INSTALL THE RANGE HOOD BEFORE CABINETRY? (TECHNICAL RATIONALE)

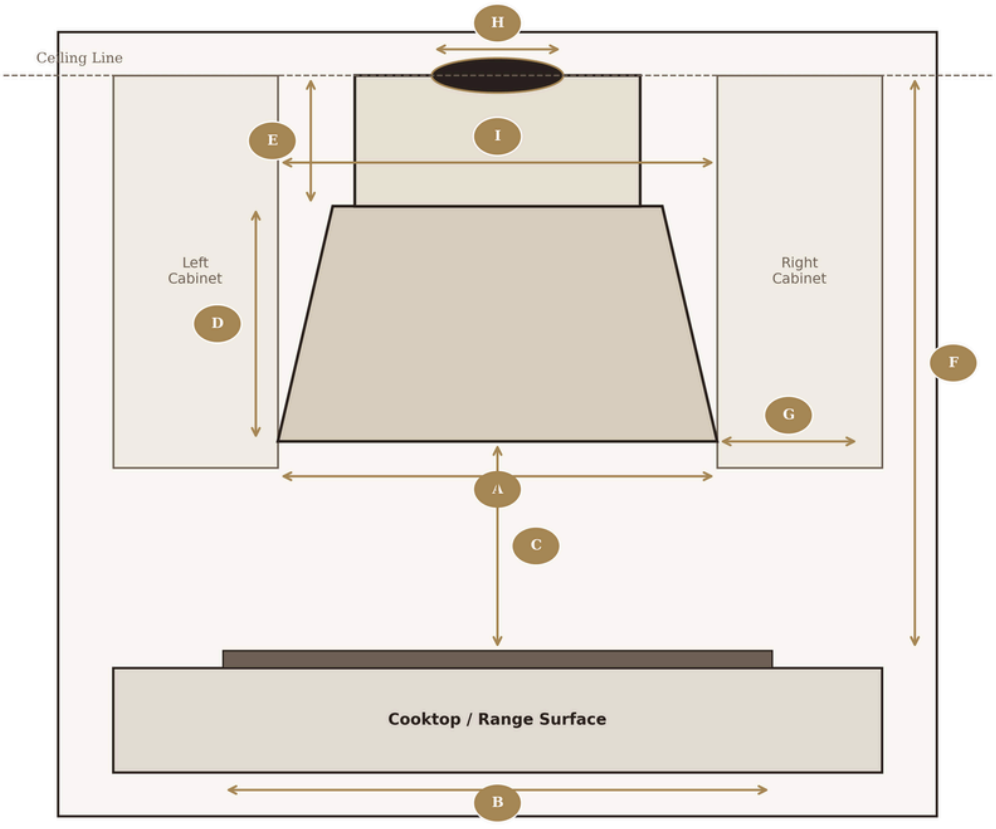
Installing heavy stone/cast concrete range hood canopy, framing, ductwork, and electrical rough-ins prior to hanging upper cabinets provides critical benefits:

- **Unobstructed Structural Anchoring:** Precast range hoods weigh 150–300+ lbs. Installing first gives open wall access to anchor steel cleats into 2x6 backing studs.
- **Elimination of Damage Risks:** Handling heavy stone over finished upper cabinets or countertops risks impact cracks or alignment failures.
- **Seamless Cabinet Flanking:** Allows cabinetmakers to scribe, level, and butt adjacent upper wall cabinets cleanly against hood casing (maintaining 1/8" expansion gap).

2. MANDATORY REQUIREMENT: CABINET ARCHITECTURAL DRAWINGS

A custom stone range hood cannot be designed or ordered without finalized Cabinet Elevation Drawings and CAD Floor Plans to verify exact spatial tolerances between cabinets (Dim I), canopy projection returns (Dim G), and ceiling datum lines (Dim F/C).

03. ARCHITECTURAL FIELD REFERENCE DIAGRAM



04. FIELD MEASUREMENT AUDIT RECORD

REF		FIELD RECORD (INCHES)
A	Hood Canopy Overall Width	_____
B	Cooktop / Range Width	_____
C	Mounting Height Above Range	_____
D	Hood Canopy Base Height	_____
E	Duct Shaft / Chimney Height	_____
F	Total Floor-to-Ceiling Height	_____
G	Hood Projection Depth	_____
I	Cabinet Opening Distance	_____
J	Backsplash Depth Allowance	_____

05. CRITICAL BACKSPLASH CALCULATIONS & HOOD LINER DESIGN FREEDOM

A. ACCOUNTING FOR BACKSPLASH SPACE

- **Wall Projection Push-Out:** Tile or stone slab (3/8" to 1-1/4" thick) installed behind a hood pushes the hood forward.
- **Sequencing Approaches:**
  - **Tile First (Pre-Hood):** Tile full wall, then mount hood over tile. Add tile thickness to depth calculations.
  - **Hood First (Post-Hood):** Mount hood to raw drywall, tile up to edges. Requires precise scribing.
- **Liner Alignment:** Ensure canopy cavity depth accounts for Dim J so liner filters stay centered over burners.

B. SELECT HOOD LINER AFTER HOOD DESIGN

- **Rigid Constraints:** Pre-purchasing an off-the-shelf insert forces fixed collar locations and limits motor size.
- **Preserving Aesthetics:** Designing exterior canopy first allows sweeping curves, tapered arches, or custom details.
- **Airflow & Duct Optimization:** Designing first ensures liner CFM (600, 900, 1200+ CFM) and duct size (8" or 10") match canopy volume and cooktop BTU output.

06. PROFESSIONAL INSTALLATION GUIDELINES & BUILDING CODE MANDATES

STEP-BY-STEP STRUCTURAL INSTALLATION STANDARD

1. **Wall Reinforcement:** Verify 2x6 horizontal wood blocking is anchored behind substrate at all cleat locations to support heavy stone loads (150–300+ lbs).
2. **Ducting & Electrical Rough-in:** Position 120V electrical supply and rigid metal ducting (8" or 10" round) centered on hood centerline.
3. **Structural Mounting Cleat:** Anchor heavy-duty steel or hardwood cleat to wall studs using 3/8" x 4" lag bolts into solid framing.
4. **Setting Canopy & Liner Insert:** Mount stone canopy onto French cleat. Slide metal ventilation liner insert into cavity and secure.
5. **Upper Chimney & Backsplash Integration:** Set chimney shaft. Tile backsplash (accounting for Dim J offset). Apply penetrating stone sealer.

INSTALLER PRE-INSTALLATION AUDIT CHECKLIST & CODE MANDATES

Structural Wall Blocking: Solid 2x6 wood framing verified behind drywall (IRC M1503.1).

Cabinet Drawing Cross-Check: Dimensions verified (1/8" expansion gap preserved).

Backsplash Offset (Dim J): Accounted for tile + thinset thickness.

Makeup Air System (IRC M1503.6): Required for blowers > 400 CFM.