SOURDOUGH LOAF SCORING & CRUMB EVALUATION SHEET

Hydration & Fermentation Physics | Lame Blade Scoring Angles | Alveoli Open Crumb Diagnostics

BAKER'S LAW: A PRONOUNCED EAR REQUIRES 30-DEGREE BLADE ANGLE, PROPER TENSION & ENCLOSED DUTCH OVEN STEAM

1. DOUGH HYDRATION & BULK FERMENTATION

Flour Blend & Hydration %:
Levain inoculation (15-20%), total hydration (68-82%), autolyse time.

Dough Temp & Ferment Time:
Track bulk fermentation temp (76-78 F optimal) and volume expansion (30-50%).

Coil Folds & Gluten Net:
3-4 sets of stretch and folds; test windowpane elasticity and domed edges.

2. LAME SCORING PATTERNS & ANGLES

The 30-Degree Angle Ear Slash:
Hold lame at shallow 30 degree angle, 1/4-inch deep to create lifting flap.

Decorative Wheat Stalk Stencils:
Dust loaf with rice flour; score shallow 90 degree cuts for delicate leaves.

Cold Retard Firmness:
Score cold dough straight from 38 F fridge banneton for clean drag-free cuts.

3. OVEN SPRING & CRUST BLISTERING

Dutch Oven Steam Trap:
Bake covered at 450 F for 20 mins to trap escaping dough steam for maximum spring.

Micro-Blistering Formation:
Long cold overnight retard produces blistering via carbon dioxide diffusion.

Caramelization (Maillard 1-5):
Uncover for final 18-22 mins until deep mahogany crust color is achieved.

4. CRUMB STRUCTURE & ALVEOLI AUDIT

Open Custard Alveoli Crumb:
Translucent, glossy hole walls indicate proper enzymatic starch breakdown.

Dense / Gummy Troubleshooting:
Under-fermentation causes 'fool's crumb' (large holes surrounded by dense dough).

Cooling Patience (2 Hours):
Never cut hot sourdough! Starch sets as steam escapes; slicing early causes gummy crumb.

MASTER SOURDOUGH BAKE TRIAL EVALUATION LEDGER (FILLABLE)

Bake / Loaf ID	Flour Blend & Hydration %	Bulk Hours / Temp	Scoring Angle / Lame	Ear / Blister (1-5)	Crumb Score