Soundproof Windows Technical Deep Dive

Detailed specification guide for Kiran Slido Craft acoustic window packages.

Source Basis

- kiranslidocraft.com sound proof windows page: listed material of construction is aluminum extrusion, insulated glass, and insulation materials, with stated sound blocking up to STC 30 dB to 52 dB.
- kiranslidocraft.com window pages: sliding, openable, top-hung, and tilt-turn formats are listed, with heavy-duty construction, long life, customization, and high-decibel sound control as specialties.
- kiranslidocraft.co.in catalog: the range includes casement, sliding, tilt-turn, top-hung, vertical sliding, and motorized soundproof windows.
- Kiran Slido Craft video library: includes on-site testing and sound proof sliding window demonstrations.

1. System Purpose

The window package is intended to reduce traffic, railway, airport, industrial, music-room, conference-room, and hospitality noise while preserving usable glazing and day-to-day operation.

The correct specification is a complete system decision: glass build-up, frame stiffness, perimeter seals, installation gap control, and surrounding wall conditions must work together.

2. Product Range

Relevant Kiran Slido Craft families include sound proof windows, sound proof sliding windows, casement windows, tilt-turn windows, top-hung windows, vertical sliding windows, motorized sound proof windows, and motorized vertical sliding windows.

For retrofit projects, the practical decision is usually between replacing the primary opening, adding secondary acoustic glazing, or using a motorized/sliding arrangement where access or ventilation remains important.

3. Acoustic Specification Inputs

- Target sound reduction or STC expectation, with source noise context such as traffic, rail, aircraft, generator, music, or process noise.

- Opening size, wall thickness, sill condition, frame depth, drainage constraints, and any facade or heritage limitation.

- Operation type: fixed, sliding, casement, tilt-turn, top-hung, vertical sliding, or motorized movement.

- Glass build-up preference, safety glass requirements, thermal expectations, and visual/aesthetic constraints.

4. Verified Product Facts To Carry Into Specs

- Material basis from source pages: aluminum extrusion, insulated glass, and insulation materials.

- Published sound-control range: STC 30 dB to 52 dB, depending on system design and site conditions.

- Listed formats: sliding, openable, top-hung, tilt-turn, vertical sliding, and motorized soundproof window variants.

- Listed use areas: residential, commercial centers, industrial establishments, multiplexes, malls, theaters, and conference halls.

- Finish note from source pages: anodized and PP colour / pure polyester options, with colour as per client requirement.

5. Construction Logic

Acoustic window performance depends on mass, airtightness, damping, and isolation. A high-mass glazing build-up will underperform if the perimeter seal or installation gap leaks air.

Frame design should resist deflection, preserve compression on seals, and avoid metal-to-structure shortcuts that bypass the acoustic assembly.

Sliding systems need special attention because moving panels must seal consistently without making operation impractical.

6. Tender Checklist

- Ask for product family, opening type, glass build-up, frame material, seal strategy, hardware, and finish.

- Ask whether performance is lab-rated, site-estimated, or based on comparable project conditions.

- Include shop drawings, fixing details, perimeter treatment, site measurement responsibility, and maintenance access.

- For motorized windows, add drive rating, controls, limit switches, safety controls, manual override, and service procedure.

7. Site QA And Handover

Before installation, verify plumb openings, clearances, finished floor/sill levels, and adjacent wall quality. After installation, verify seal compression, smooth operation, lock engagement, drainage, and visible gap closure.

For high-noise sites, buyer-side acceptance should include subjective inspection plus agreed measurement method when a formal acoustic target is part of the contract.

Next Step

Send drawings, opening sizes, noise context, photos, location, and target performance to info@kiranslidocraft.com for a project-specific engineering response.