FTS, FCS and PSS: Mechanism Reference

Compare the described mechanism before comparing project capacity.

These names are used in the reviewed Beijing Weiye/WELKIN catalog. They do not guarantee a universal cross-brand classification. The comparison explains how fabric is moved or supported; it does not select a motor, certify a span or authorize a structural installation.

Three different skylight mechanisms

Attributed to the reviewed WELKIN catalog. Concept drawings, not shop drawings.

FTS



Two dedicated motors + electronic controller

Coordinated fabric / traction movement and tension

Source: English p35; Chinese p39

FCS



Single tubular motor + circulating wire path

Moving supports and traction bar fold the fabric

Source: English p37; Chinese p41

PSS



Folding fabric moving along two side tracks

Catalog distinguishes manual and electric drive versions

Source: English pp39-40; Chinese pp43-44

No span, slope, structural reaction, UV or acoustic performance is certified by this comparison.

New simplified drawings based on the reviewed mechanism descriptions. No source artwork or project photograph has been reproduced.

Catalog system	Distinguishing mechanism	Next engineering question
FTS	Two dedicated motors with electronic coordination of fabric and traction	Which exact motors/controller, tension method and load path?
FCS	Single tubular motor with wire circulation and moving support/traction members	Which cable path, support spacing and folding geometry?
PSS	Folding fabric along two side tracks; manual and electric variants	Which drive, track geometry and support/fixing interface?
FSS - separate category	Motor at one end and spring mechanism at the other	Which spring/drive pairing and tension limits?

What remains project-specific

Provide span and projection, slope/curve geometry, mounting structure, actual fabric, maintenance access and the responsible structural discipline. Ask for the selected system drawing, reactions/load information, tensioning approach, motor/control identification and applicable installation documents. A catalog mechanism diagram cannot answer those fields.

Do not transfer a published span from a different brand or system. This reference intentionally omits unverified UV, acoustic, energy-saving and wind-performance percentages. Indoor examples do not establish exterior weather suitability.

Procurement handoff

Input	Record
Geometry and intended use	Opening ID, drawing revision, span/projection, slope and indoor/outdoor context
Building interface	Structure owner, attachment responsibility and requested load/reaction information
Shading package	Named mechanism, exact motors/drives, fabric and tension arrangement
Service and control	Safe access plan, replacement route, selected control functions and integrator
Approval scope	Named reviewers; unresolved items; no automatic design release

Use the existing Skylight Shading Selection Matrix to prepare the brief. Complex non-standard systems need specialist review; this comparison is educational and does not promise overseas installation contracting.

Sources and procurement entry

Beijing Weiye: Sunshade Product Manual (2026), PDF pp.33-40; reviewed supplied copy

Beijing Weiye Chinese product presentation, PDF pp.39-44; reviewed supplied copy

Somfy FTS architecture reference, printed p20; separate brand/system

Skylight Shading Selection Matrix

Open the related Saiwenna resource