

Choosing a Span System

Architecture

Which structural system suits which span, as a first move in early design.

Indicative economic spans for early scheme design only.

System	Typical span
Timber joists	up to about 5 m
Concrete flat slab	6 to 9 m
Composite steel and metal deck	6 to 15 m
Post-tensioned concrete	9 to 18 m
Steel trusses	15 to 45 m
Space frames	30 to 90 m
Cable and membrane	over 60 m

Educational reference. Economic ranges vary with loading, market and fire requirements; an engineer must confirm any span.