Quick guide - file formats for CAD drawings

File type	Software	Type	Compatibility	Usage	Pros	Cons
DWG	AutoCAD	2D, 3D	High	Technical drawings	High accuracy; Industry standard for CAD data	Not suited to complex 3D models
DXF	AutoCAD	2D, 3D	High	Share geometric designs	Most universal 2D file format	Not all complex object types are supported
DWS	AutoCAD	2D, 3D	Low	Enforce drawing standards	Maintain design quality standards	Can only be used with AutoCAD
DWT	AutoCAD	2D, 3D	Low	CAD document templates	Streamlines drawing process	Can only be used with AutoCAD
RVT	Revit	3D, BIM	Low	BIM for architecture, engineering, construction	Store complex and specialised BIM data	Convert files to use with other BIM software or share with clients
RTE	Revit	3D, BIM	Low	Template for Revit project files	Streamline BIM design process	Can only be used in Revit
RFA / RFT	Revit	3D, BIM	Low	Store Revit family data	Pre-set parameters and constraints for object families	Can only be used in Revit
NWD	Navisworks	3D, BIM	Medium	Visualising 3D design, model coordination, clash detection	Share outputs with stakeholders, without sharing source files	Provides a snapshot - not updated if source data changes
NWF	Navisworks	3D, BIM	Low	Ongoing engineering & structural co-ordination	Collates CAD and BIM data from multiple sources	Can only be used in Navisworks
STEP / STP	Non-proprietary	3D	High	Modelling 3D solids	High interoperability between CAD/CAM packages	Cannot include parametric data, constraints or sketches (not suitable for BIM)
ICF	Non-proprietary	3D, BIM	High	Model checking, clash detection and coordination in OpenBIM	High interoperability for BIM data	May be less accurate than proprietary formats