



ZWCAD 2017 Official

PRODCUT RELEASE NOTES
ZWCAD PRODUCT TEAM

ZWSOFT | 2016/6/29

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ZWCAD 2017 Release Notes

32bit: *VERNUM =2016.06.28(4864)_Win32*

64bit: *VERNUM=2016.06.28(4864)_x64*

1 Overview

ZWCAD 2017 Official is released today. It can display 65 kinds of CAD entities, create 49 kinds of entities and 16 kinds of database objects. It supports 509/547 commands and 433/473 system variables at the time being. Details are as follow :

- Open and Save DWG/DXF/DWT files, display 65 kinds of CAD entities
- Create entities such as Line/Arc/Circle/Ellipse/Text/MText/Table/Dimension/Box/Cone and so on. Complete 65 out of 66 kinds
- Create objects such as Block/Layer/LineType/Textstyle/View/UCS and so on
- Common modification functions such as Erase/Move/Copy/Mirror/Scale/Rotate/Explode/Purge and so on, as well as the exclusive modification functions such as refedit/attedit/eattedit/mleaderedit/taledit/splinedit
- MouseHover Highlight and select entities
- Grip editing, supports 5 edit modes (the Polyline has been optimized)
- View and edit properties of selected entities with Property Palette
- Drawing environment settings, such as drawing unit/layers/linetype/linescale/lineweight/color/ textstyle/dimension style/tablestyle/view/viewport and so on
- Precision tools such as grid snap/object snap/snap overrides/Ortho/polar tracking/temporary osnap
- Support Classic interface, and switch interface from classic and ribbon freely
- Support CUI editor
- Automatic input complete
- Plotting
- Crash Report Manager
- Redundant License Server (TIMEOUT is invalid)
- Support LISP/ZRX interfaces

2 Main Features

2.1 Open & Save

ZWCAD 2017 can open drawings with 65 kinds of CAD entities properly that are created by AutoCAD, and the compatibility and stability have been improved a lot compared with previous versions (refer to the chart below).

ZWCAD 2017 64bit owns better performance of dealing with big drawings

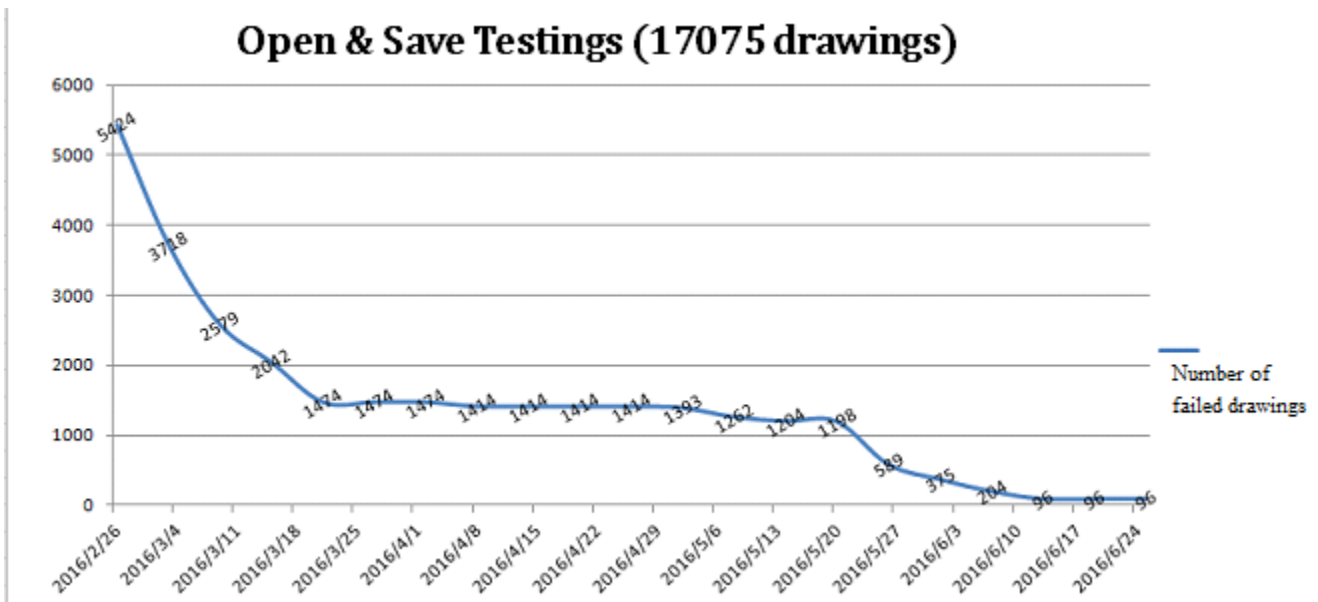
Basic Geometry Entities

Point, Ray, Xline, Line, Arc, Circle, 2DPolyline, LWPolyline, 3dPolyline, Ellipse, Shape, Solid,
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Spline, Trace
Annotative Entities
Text, Mtext, Arcxtext, Attdef, Attribute, Field, Tolerance, Hatch, Gradient, Mleader, Table, Leader, 2LineAngularDimension, 3PointAngularDimension, AlignedDimension, ArcDimension, DiametricDimension, OrdinateDimension, RadialDimension, RadialDimensionLarge, RotatedDimension, Wipeout, Viewport
Complex Entities
Insert, MInsert, Mline, Xref, Image, DgnUnderlay, DwfUnderlay, PdfUnderlay
3D Solid/Mesh/Surface
Helix, Region, 3Dface, Body, 3dsolid, Surface, ExtrudedSurface, LoftedSurface, PlaneSurface, RevolvedSurface, SweptSurface, SurfBlend, SurfFillet, SurfNetwork, SurfOffset, SurfPatch, Mesh, PfaceMesh, PolygonMesh, Section

Already Known Issue:

- 1> Could not open files with R12 DXF format.
- 2> Those entities may display incorrectly: DgnUnderlay, DwfUnderlay, PdfUnderlay and some 3D solid/Mesh/Surface



2.2 Create CAD Entities

ZWCAD 2017 can create 49/66 kinds of CAD entities in all, including most of the frequently used geometry entities, annotative entities, and 3D solids

No.	Entities	Commands	Support	Memo
1	Point	POINT, DDPTYPE, MEASURE, DIVIDE	✓	
2	Xline	XLIN	✓	
3	Ray	RAY	✓	

4	Line	LINE	✓	
5	Circle	CIRCLE	✓	
6	Arc	ARC	✓	
7	2dpolyline	PLINE, RECTANG, POLYGON, DONUT, BOUNDARY, REVCLOUD, PLINETYPE	✓	
8	LWPolyline	PLINE, RECTANG, POLYGON, DONUT, BOUNDARY, REVCLOUD, PLINETYPE	✓	
9	3dpolyline	3DPOLY	✓	
10	Ellipse	ELLIPSE	✓	
11	Wipeout	WIPEOUT	✓	
12	Spline	SPLINE	✓	
13	Text	TEXT, -TEXT, FIELD	✓	
14	Arctext	ARCTEXT	✓	
15	Mtext	MTEXT, -MTEXT, FIELD	✓	
16	Attribute definition	ATTDEF, -ATTDEF, FIELD	✓	
17	Block Reference	INSERT, -INSERT, DDINSERT	✓	
18	MInsert	MINSERT	✓	
19	Raster Image	IMAGE, -IMAGE	✓	Not Support -Image
20	External Reference	XREF, -XREF	✓	
21	OLE	INSERTOBJ	✓	
22	Hatch	HATCH, GRADIENT	✓	
23	Rotated Dimension	DIMROTATED, DIMLINEAR, DIMBASELINE, DIMCONTINUE, QDIM	✓	
24	Aligned Dimension	DIMALIGNED, DIMBASELINE, DIMCONTINUE, QDIM	✓	
25	Angular Dimension	DIMANGULAR, DIMBASELINE, DIMCONTINUE, QDIM	✓	
26	3 Point Angular Dimension	DIMANGULAR, DIMBASELINE, DIMCONTINUE, QDIM	✓	
27	Arc Length Dimension	DIMARC, DIMBASELINE, DIMCONTINUE, QDIM	✓	
28	Radial Dimension	DIMRADIUS, DIMRAD, QDIM	✓	
29	Diametric Dimension	DIMDIAMETER, DIMDIA, QDIM	✓	
30	Jogged Dimension	DIMJOGGED	✓	
31	Ordinate Dimension	DIMORDINATE	✓	
32	Leader	LEADER, QLEADER	✓	
33	Tolerance	TOLERANCE	✓	
34	MLine	MLINE	✓	
35	Trace	TRACE	✓	

36	Solid	SOLID	√	
37	Shape	SHAPE	√	
38	MLeader	MLEADER	√	
39	Table	TABLE, -TABLE	√	Not support Helix Not support 3dface
40	Helix	HELIX	×	
41	Region	REGION, BOUNDARY	√	
42	3Dface	3DFACE	×	
43	Body	SPHERE/EXPLODE	√	Not support Pyramid
44	3dsolid	BOX, WEDGE, CONE, SPHERE, CYLINDER, TORUS, PYRAMID, EXTRUDE, REVOLVE, SWEEP, LOFT	√	
45	Surface	SPHERE/EXPLODE	√	
46	PlaneSurface	-	×	
47	ExtrudedSurface	EXTRUDE	√	
48	RevolvedSurface	REVOLVE	×	
49	SweptSurface	SWEEP	×	
50	LoftedSurface	LOFT	√	
51	SurfBlend	-	×	
52	SurfFillet	-	×	
53	SurfNetwork	-	×	
54	SurfOffset	-	×	
55	SurfPatch	-	×	
56	Mesh	EDGREURF	√	
57	PfaceMesh	PFACE	√	
58	PolygonMesh	3DMESH	√	
59	Section	SECTION	×	
60	Camera	-	×	
61	Light	-	×	
62	Sun	-	×	
63	DgnUnderlay	-	×	
64	DwfUnderlay	-	×	
65	PdfUnderlay	-	×	
66	Viewport	VPORTS, VIEWPORTS, -VPORTS, MVIEW	√	

2.3 Create Database Objects

ZWCAD 2017 can create a total 16 kinds of database objects:

No.	Objects	Commands	Support	Memo
1	Block	BLOCK, -BLOCK	√	
2	Layer	LAYER, -LAYER	√	

3	TextStyle	STYLE, -STYLE	√	
4	LineType	LTYPE, LINTYPE, -LTYPE, - LINTYPE	√	-ltype create line type to linetype file
5	View	VIEW, -VIEW	√	Not support View
6	UCS	UCS, UCSMAN,	√	
7	Viewport	VPORTS, VIEWPORTS, -VPORTS	√	
8	DimStyle	DDIM, DIMSTYLE, -DIMSTYLE	√	
9	RegApp	XDATA	√	
10	Group	GROUP, -GROUP	√	
11	LayOut	LAYOUT, LAYOUTWIZARD	√	Not Support LayoutWizard
12	MLineStyle	MLSTYLE	√	
13	PlotSettings	PAGESETUP, PSETUPIN	√	
14	PlotStyleName	CONVERTPSTYLES, CONVERTCTB, PLOTSTYLE	√	
15	TableStyle	TABLESTYLE	√	
16	Color	COLOR, -COLOR	√	

2.4 Edit Entities

2.4.1 Common Modification Functions

- ✓ Support(22)
Erase/Copy/Mirror/Offset/Array/Move/Rotate/Scale/Trim/Break/Join/
Chamfer/Explode/Purge/Draworder/Copyclip/Cutclip/Pasteclip/Matchprop
/ Stretch/Extend/Fillet

Known issues:

- 1> Copy/Paste
 - a. Cannot activate the viewport created by copyclip
 - b. Cannot copy/paste shape
 - c. Can only copy/paste 4027 entities for once, and the rest of the entities will not be copied/pasted
- 2> Purge
 - a. Cannot purge the nested items completely
 - b. Dimensions/tolerances and even the annotative scales in use are deleted by purge unexpectedly
 - c. Cannot purge the text style used by table
 - d. Delete all the groups unexpectedly if you use * to represent group name, even if you reply "No" when the system asks whether to delete or not

- 3> Cannot offset splines and ellipses
- 4> Cannot fillet to circles, arcs and ellipses

2.4.2 Exclusive Editing Features

- ✓ Support(16)
Pedit/Splinedit/Dedit/AttEdit/Hatchedit/Refedit/Dimreassociate/DimEdit/Xclip/Vpclip/Eattedit/Imageclip/Mleaderedit/Tabledit/MLEdit/DimInspect
- × Not-Support(5)
BAttMan /DimSpace/DimJogline/DimTEdit/DimBreak

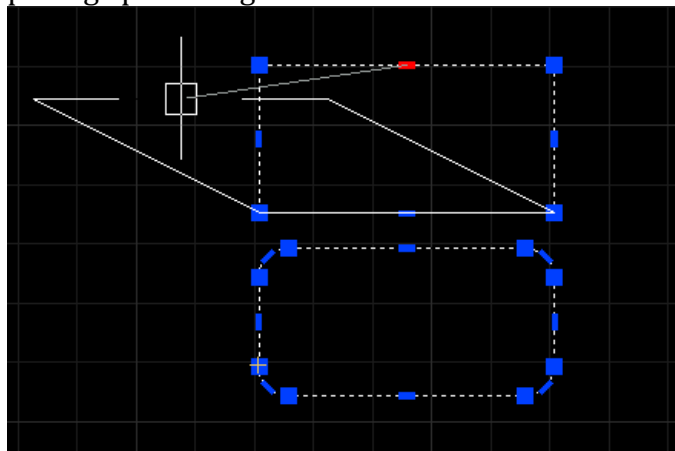
Known issues:

- 1> Attedit command cannot edit nested attribute block

3 New & Enhanced Features

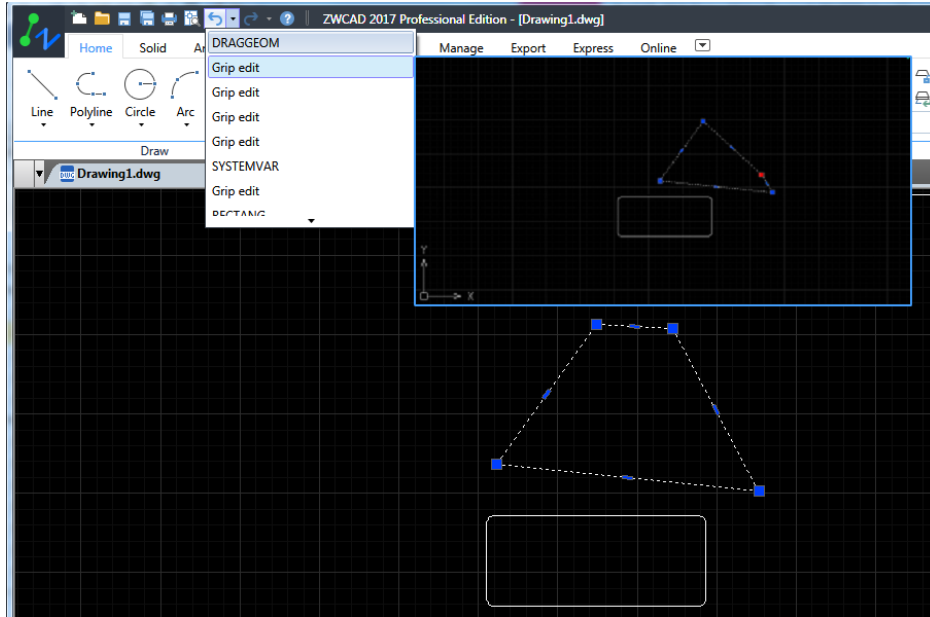
3.1 Grips Editing

- Magnet: the cursor will automatically pick the nearby grip in editing mode, and the grip will display in different color
- Edit: Space/Shift key switches the edit mode: stretch/scale/rotate/mirror/move
- Multiple grips editing
- Better pline grips editing



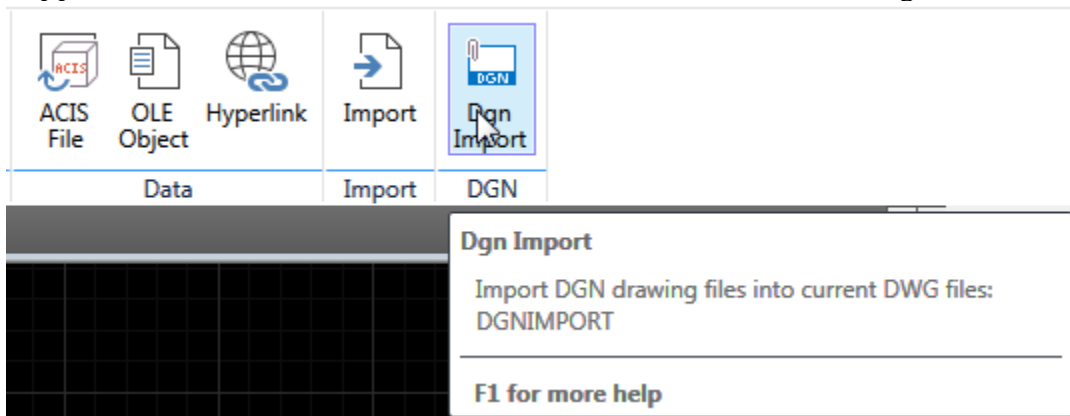
3.2 Undo/Redo Preview

- Command: undo snapshot
- List preceding operations, you can choose the undo/redo point, and preview the result



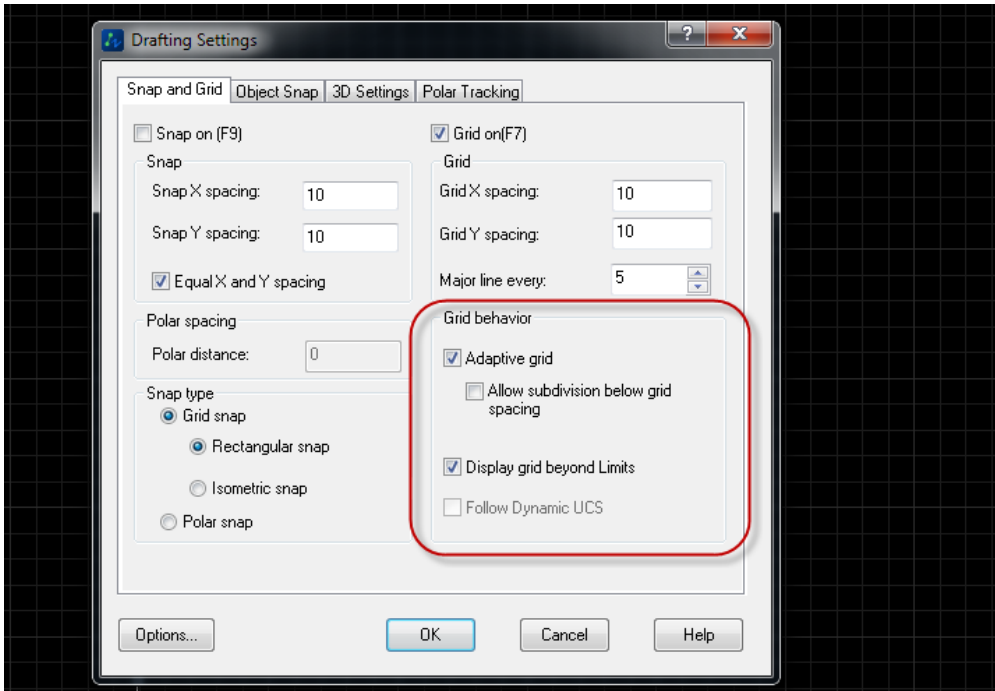
3.3 DGN Import

Can now import data from DGN file to DWG file with DGNIMPORT command. Supports MicroStation V7 and V8 DGN file format at the time being.



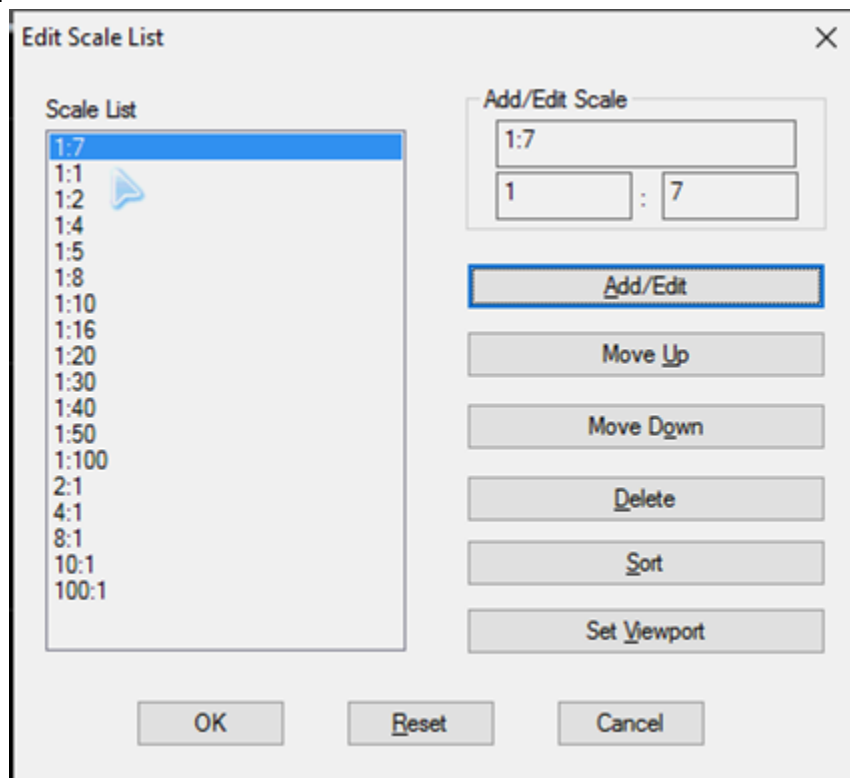
3.4 Adaptive Grid

The grid can adaptively change grid line density when zoom in or zoom out.



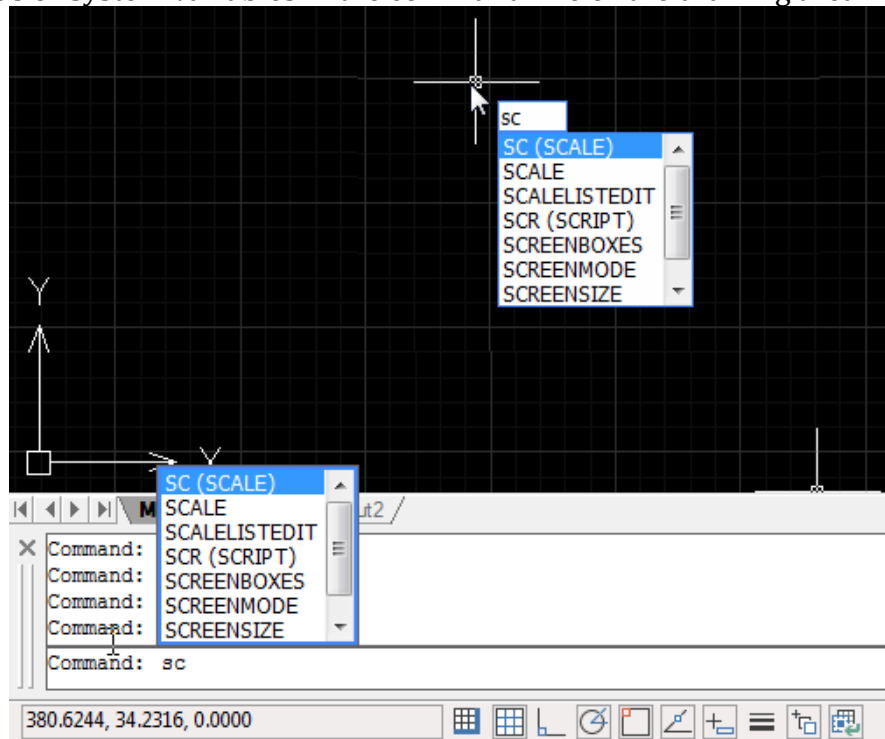
3.5 Scale List Editing

You can add/edit the scale value to the scale list, or change the position of selected scale value, and sorts the values in the list, which could be applied to the layout viewports.



3.6 Dynamic Input

With dynamic input feature, you can get dynamic prompt when you input the commands or system variables in the command line or the drawing area.



3.7 In-place Edit the Table

Double click the table, or call TABLEDIT command, you can in-place edit the table: insert row/column, delete cell, merge cells, unmerge cells, lock cells, align cells. You can see that we have column and row labels for the table now.

	A	B	C	D	E	F	G	H	I
1	DOOR SCHEDULE								
2	SYM.	WIDTH	HEIGHT	STYLE	REF#	MANUFACTURER	QTY	COST	TOTAL
3	1	.90 m	2 m	TWO PANEL	TS 3010	TRU STYLE	2	189.00	378.00
4	2	.8 m	2 m	ONE PANEL	TS 1040	TRU STYLE	7	189.00	1323.00
5	3	1.5 m	2 m	FRENCH DOORS	FL 301	TRU STYLE	1	329.00	329.00
6	4	1.5 m	2 m	FRENCH DOORS	FL 1000	TRU STYLE	1	329.00	329.00
7	5	.70 m	2 m	ONE PANEL	TS 1040	TRU STYLE	1	189.00	189.00
8	6	1.5 m	2 m	BI-FOLD	BT 5068	TRU STYLE	4	119.00	476.00
9	ESTIMATED COST OF DOORS								3024.00

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