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# DWG-Files in 3DS Mvisit to Import to, Doors and Windows Location of Build

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**Annotation:** This article discusses the importance of architectural design in autodesk 3ds max 3d modeling software. The main directions of application of this program in the field of architectural design and professional design, as well as in the field of educational design are considered. It also provides information on the undp in its use and benefits of this software.

Key words: 3d modeling, architectural design, autodesk 3ds max, architecture, design.

Complex projects on while working, often in various different problems solve that a few in the software of the product you use should. Of course, the ideal case, all of the things one program performance goals according, but this is every time also can be not.

For example, buildings and structures in the design of AutoCAD design study, the model building and the documents in the preparation of, 3ds Max, while high quality photorealistic pictures and videos in the preparation of it is used.

A multiple software products in a single project on to work with information one system to another to transfer the need with associated. Each of a program's data in its format again works and saves, so for ma reference transfer for geometry and data export operations perform increase and later import to you need. AutoCAD in drawings and models in DWG format, 3ds Max at while max is in the file are stored, so for AutoCAD model you can not open in 3ds Max and vice versa.

This subject we have AutoCAD from data in 3ds Max and on the contrary, 3ds Max from AutoCAD to import to methods review, we will.

#### AutoCAD from 3d max to import to:

Both flat drawings and models can be transferred from AutoCAD to 3ds Max.

The point is that in AutoCAD, you can create rigid geometries, surfaces and mesh bodies, while 3ds Max only works with mesh bodies. This attitude with3ds max to be imported have been each how the 3d model of the specified accuracy with the machine into the body is turned.

3ds Max geometry in the DWG file directly to import to supports.

From AutoCAD to 3ds Max how to import make, you can:

In AutoCAD, prepared for building the model, we will build or we open and the file in DWG format are stored. Attention pay, this file is a flat drawing and a 3D model is also this into gets (1-picture).

3ds Max, select open and the project equipment set up. The usual if, of measurement, the imperial system in 3ds Max to set and AutoCAD in the model metric system after the installation, the subscriber reason for 3ds Max you desired unit set, you should.



1-picture.

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"Personalize" opens the menu "Unit Setup", select. "Scale with display unit in the field to appear in the neck are present in the window "Metric" option select and millimeters to select. Then the "system Unit Setup" key press and "System Unit Scale" select put in millimeters (2-picture).

Units Setup	7 ×	System Unit Setup	×
System Unit Setup Display Unit Scale		System Unit Scale 1 Unit = 1,0 ✓ Respect System	Millimeters 🔹
Metric Millimeters		Origin	16777215,0mm
US Standard Feet w/Fractional Inches ¥ 1/3		Distance from origin: 1,0mm Resulting Accuracy: 0,000	n 0001192mm
Default Units: 🔹 Feet 🕒 Inches		ок	Cancel
FL = 660,0 Fee	• -		
Lighting Units International			
ок	Cancel		

## 2-picture.

Program in the menu "Import" command accounted select the DWG file format, select and from AutoCAD imported the file you specify.

"AutoCAD DWG / DXF import parameters" in the window we import we set the parameters.

Curved line smoothing to the answer which gives the "auto-smooth the adjacent face" and "step Curve" option to the attention you give. Their specific values are highly dependent on the geometry with which you want to import and are selected individually in each case (3-picture).

AutoCAD DWG/DXF Import Opti	ons	7	×
		lignore du	9
Geometry   Layers   Spline Renders	9		
Model Scale			
		III Rescal	
Resulting model size: 24025,0mm	x 26732,82mm x	3000,0mm	
Derive AutoCAD Primitives by			
Use Extrude modifier to represen	t thickness		
III Create one scene object for each	AutoCAD Architec	ture one	
III Use scene material definitions			
Geometry Options			
Weld nearby vertices			
K Auto-smooth adjacent faces	Smooth-angle:	15.0	
iii grient normals of adjacent faces	s consistently		
III Gep closed spines			
Texture mapping: Generals coo	rdinates for all obj	ecte	
	Curye steps:	107	-
Maximum surface gevia	tion for 3D solids:	25.4mm	
Include			
# External references (wels)	Lights		
E Points	Sun and sky		
1000	UCSs (grids)		

3-picture.

Import being completed after, we have AutoCAD at is as 3ds Max at just as same geometry we can, but the internal format (4-picture).

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## 4-picture.

That remember if you keep, all AutoCAD solid substances import when doing on the net has rotating (5-picture).



## 5-picture.

You AutoCAD flat drawing the picture of the 3ds Max to import your going to if you are not, originally all the drawing of the geometry of the spread of the lines and the arc using polylines and strips using that is created in sure form make.

PEDIT using the command, cut the strips and bows into polylines.

Now that we have imported the model from AutoCAD to 3ds Max, we can save all the information in the file with the extension 3ds Max in the internal format - MAX.

### Doors and windows the location of the build:

3d Max graphics in the program door and window rose of the building, a number of methods are there. Of these, in the most often applied Boolean and ProBoolean modification through made to is. We this topic in this modification by made to review we will take.

First of all, you of two or more over the object you create must. Of them, one of the main is, his on the basis of the operation is conducted. Preliminary cutting for they intersection you should. The association for this need, it is not. Now you object to choose and Create – Geometry – Compound Object – Boolean - press must (6-picture).



6-picture.

The object of the mutual work trigger to Add the operand key press you should. Work in the zone of the object and clicking by the operation out carried (7-picture).

All objects are listed in the totals Operands window. The operation can be canceled by pressing the Delete key or Ctrl + Z key.

Add O	perands
Operands:	
Box00	1
Box00	2
Remove	Operands
Remove Open Book	Operands ean Explorer
Remove Open Book	Operands ean Explorer
Remove Open Book • Operand Pa	Operands ean Explorer arameters
Remove Open Book • Operand Pa	Operands ean Explorer arameters
Remove Open Book • Operand Pa • Union • Union	Operands ean Explorer arameters Merge
Remove Open Book • Operand Pa • Union • Intersect	Operands ean Explorer arameters Merge @ Attach
Remove Open Book • Operand Pa • Union • Union • Intersect • Subtract	Operands ean Explorer arameters Merge @ Attach Disert
Remove Open Book Operand Pa Union O Intersect	Operands ean Explorer arameters Merge @ Attach Insert Imprint
Remove Open Book Operand Pa Operand Pa Operand Pa Contense of Contense Operand Pa Operand Pa Operand Pa Operand Pa	Operands ean Explorer Merge Merge Mattach Insert Imprint Cookie

7-picture.

*Union* - object single structure combines. They contact at the point of each other, welded, of new point, create and polygons the form makes. To each other, similar to which geometry will be deleted.

Merge - mash combines, but the intersection geometry take to does not remove. These parts of a particular object is converted.

Intersect - just the point of intersection geometry saves. Intersecting all the parts taking away.

*After atta* - Edit Poly in the modifier Attach when the function of an institution similar to. Preliminary combines, but a new mesh generate does not and no thing does not turn off.

Subtract - the selected operand in the form of the main operand in the part cut away. All the selected operand also will be deleted.

Insert - arranged with a kind works. This type with the selected operand is not removed.

#### **Additional features:**

*Imprint* - selected operand in the form of the main object, the incision yield will. You this function to separate with together in work (subtract, intersect, Insert), then no how the shooting will not be.

Cookie - a selected object by I am designing a grid will not create.

This place is empty will be (8-picture).



8-picture.

*Material* - the main object of material for the new operand (Operand lovely app Material) or available if (retain the original material) to be added to select the opportunity it gives.

*Display* - operand are the screen changes. The results only mutual effects of the results shows. The operand and the operand Selected , which is the operand to show to choose the opportunity it gives. Shaded in the form show, the grid of the screen the full changes (9-picture).



9-picture.

Updated Boolean at first than positive and negative side has. Good new option, that is, the interface is more responsive and clear it is. Negative on the side, that is, main them from operand after selecting separated get as some mutual influence of the type of lose. However, Boolean each how 3ds max user armory is an indispensable tool to be remains.

ProBoolean command following logical operations supports: Union Correction, Subtraction, Combine, Attach, after Insert, Imprint and Cookies. In such a case, one ProBoolean order in various different Boolean operations to be completed can. That is in addition to, ProBoolean operation results of rectangular facets into be divided can, they Meshsmooth and Turbosmooth to the operation of the application through well is settling.

ProBooleane also same Boolean command like a same works. This command is valid independent testing see.

**Conclusion** I say when auto cad software drawn "DWG" files in 3ds Max program to import in any how the problem do not have. Auto cad program in millimeters drawn on stream and how "DWG" files 3ds Max a program to when imported, it is possible to twist in centimeters. Good from the side, one 3ds Max models are more centimeters measure drawn.

## **USED LITERATURE**

- Sidorovich E.A. Educational and methodical manual. Murmansk: Murmansk Arctic State University, 2019. 100 p.
- 2. Kelly L. Murdock's Autodesk 3ds Max 2015 Complete Reference Guide. SDC Publications, 2014.
- 3. Lobkov Bazilevich E. Three-dimensional modeling A. О. M. programs used in architectural design (using the example of Autodesk 3ds Max and Rhinoceros). New ideas of the new Century 2017: materials of the Seventeenth International Scientific Conference: in 3 volumes / Pacific State University Khabarovsk: Publishing House the Pacific of State -University, 2017. - Vol. 2. pp. 182-186.
- 4. Murdock, K. L. (2012). Autodesk 3ds Max 2013 Bible (Vol. 799). John Wiley & Sons.
- 5. Pecarev L. D. Architecture modeling V 3ds max. STD.: BHVS-Petersburg, 2007. 256 C.ISBN 978-5-94157-474-2.