

**PROGRAM**



**UNDER CONSTRUCTION**

## 0 MY QUESTIONS

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- a. **HOW SHOULD THE MATERIAL BEHAVIOUR FROM THE PERSPECTIVE OF AUTODESK BE?**
  - a. As in Revit?
  - b. As in Inventor?
- b. **WHY THE MATERIAL INFORMATION (MATERIAL NAME AND MATERIAL APPEARANCE) ARE USED DIFFERENTLY IN THE TWO PROGRAMS?**
- c. **WHY ARE THE DEMANDS ON THE MATERIAL LIBRARIES IN BOTH PROGRAMS DIFFERENTLY (PHYSICAL MATERIAL IN INVENTOR)?**
- d. **WHY ARE THE ORIGINS OF THE MATERIAL MAPS IN BOTH PROGRAMS DIFFERENT?**
- e. **WHY MATERIAL OUT OF INVENTOR WILL BE SHOWN WITHOUT A PREVIEW IN THE MATERIAL LIBRARY INSTEAD LIKE REVIT MATERIAL (WITH PREVIEW) ?**
- f. **WHY THE SCALE (SIZE) OF THE MAPS IS DIFFERENT IN BOTH PROGRAMS ?  
( MM IN REVIT, CM IN INVENTOR )**

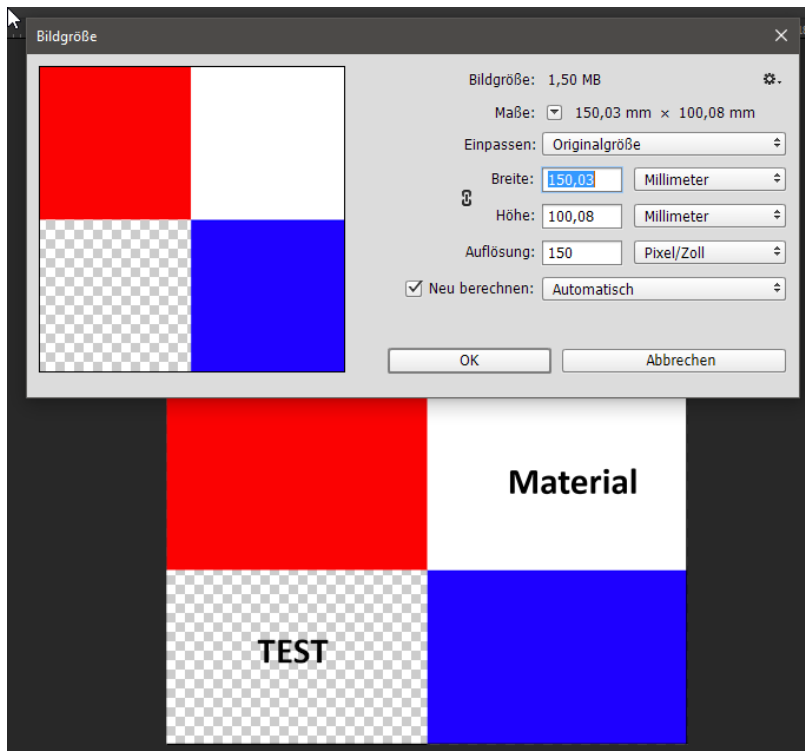
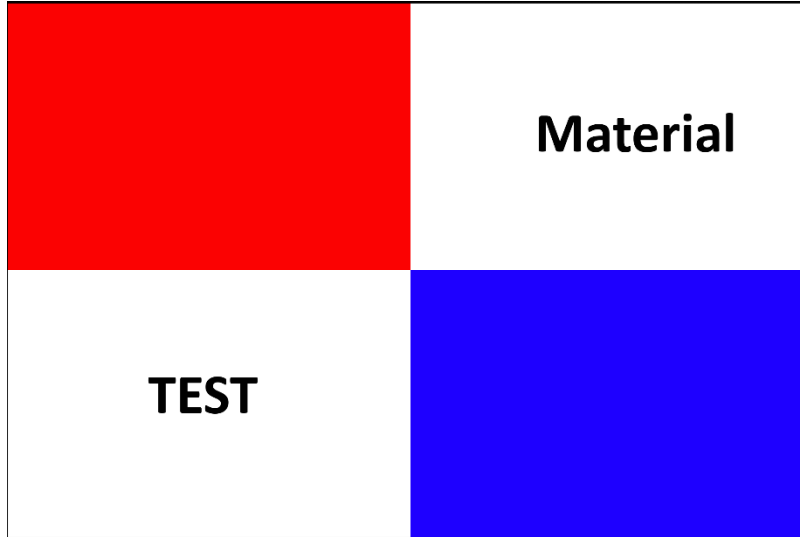
I would like to explain my Problems respectively the Behavior of the Materials in both programs Step by Step:

# 1 CREATING A MATERAIL MAP

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PNG 150x100mm, 150DPI

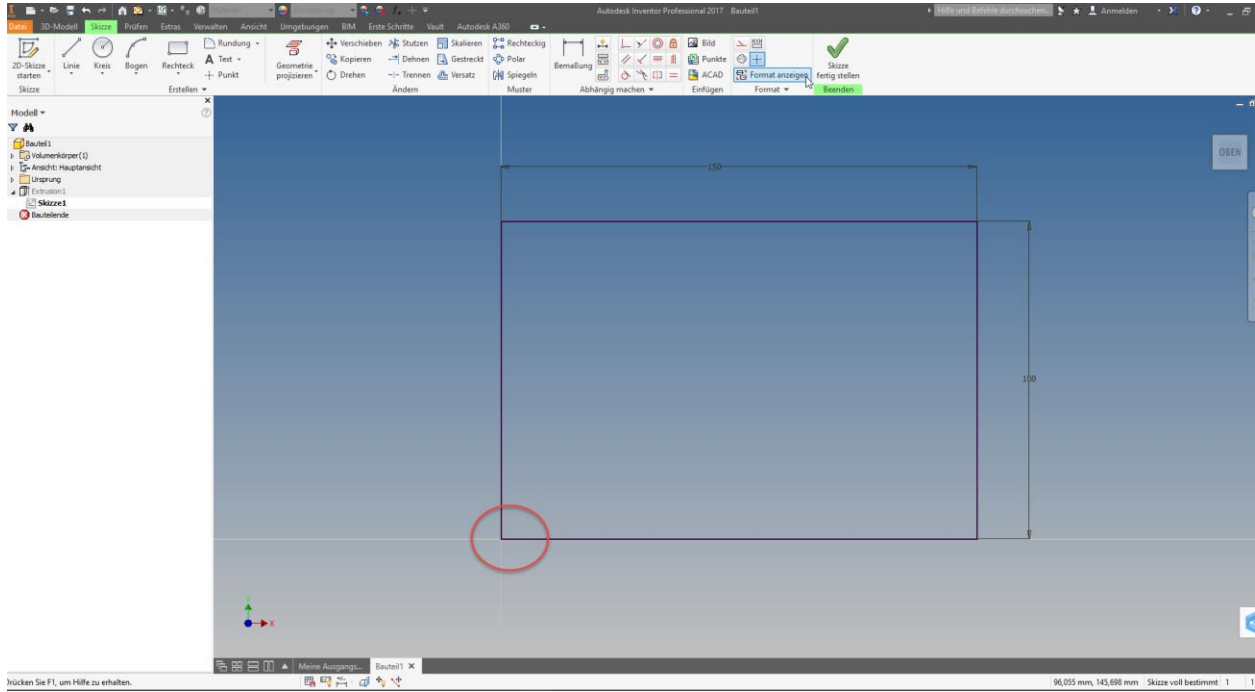
Photoshop



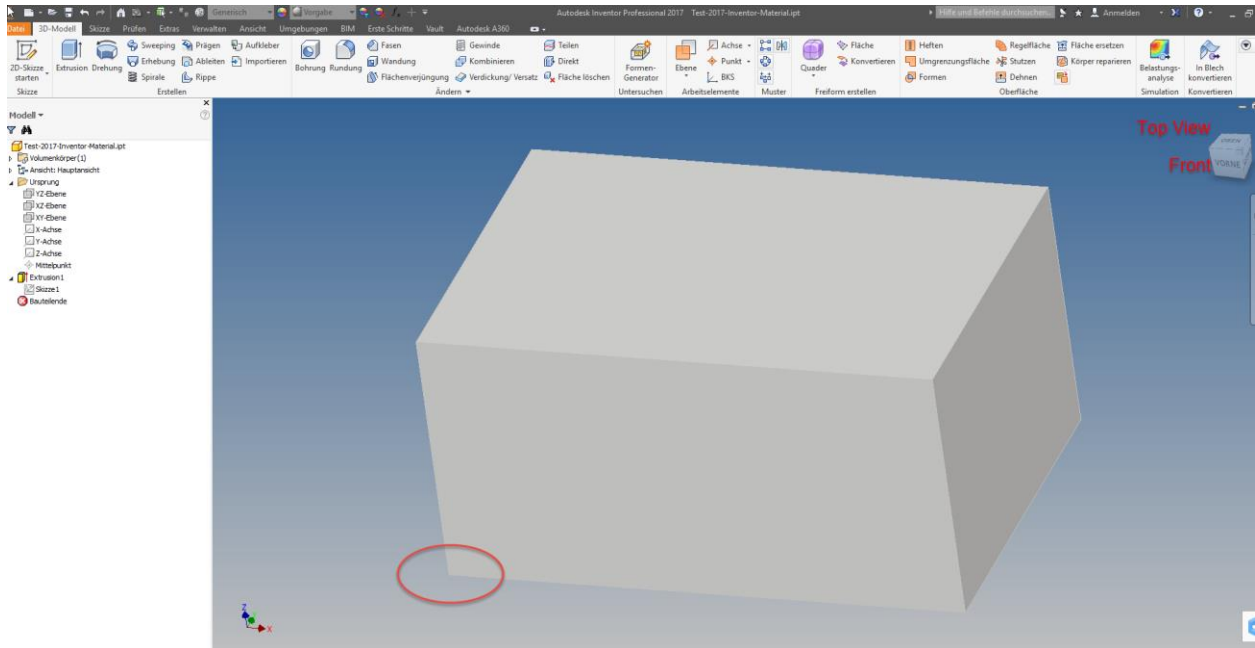
## 2 BUILD A NEW PART IN INVENTOR

Inventor 2017

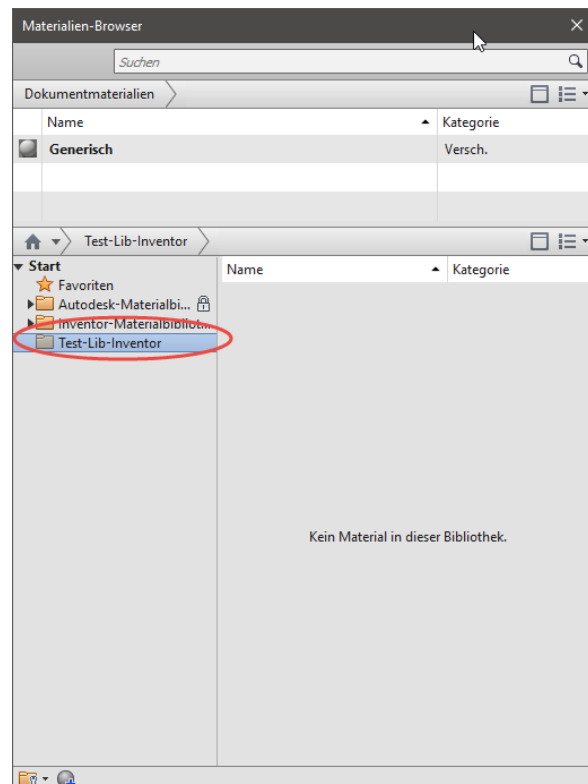
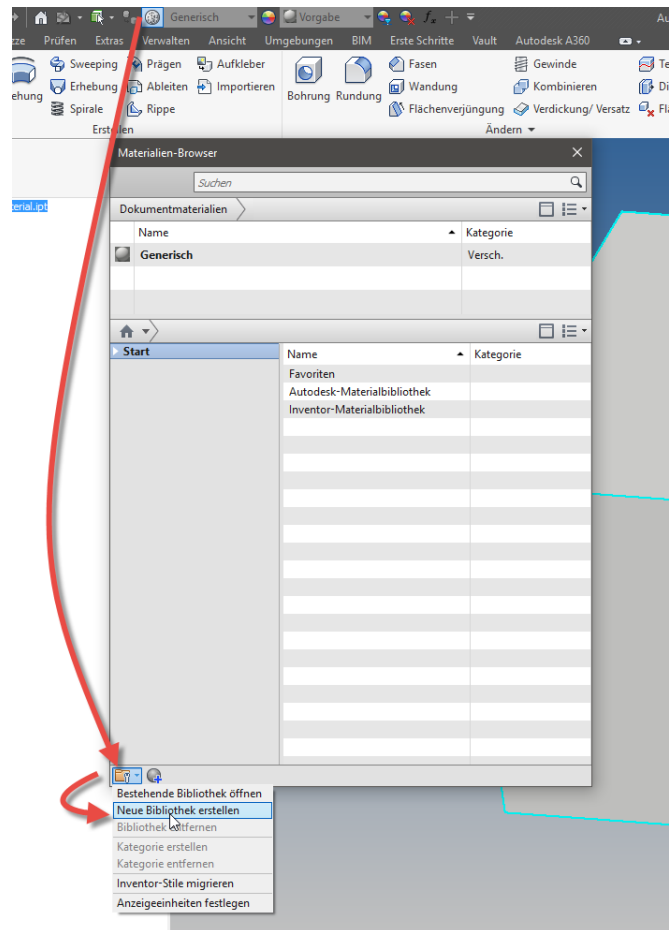
Cube 150x100x75mm



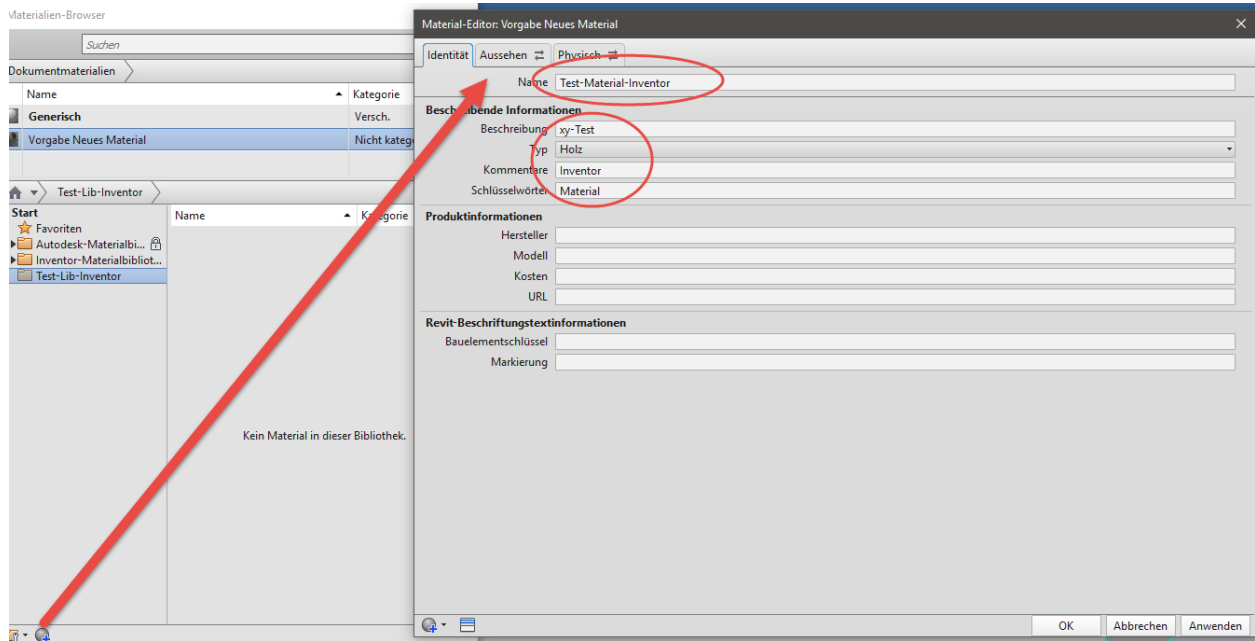
Sketch on xy-Plane (Top View), starting on 0,0, Extrusion 75mm



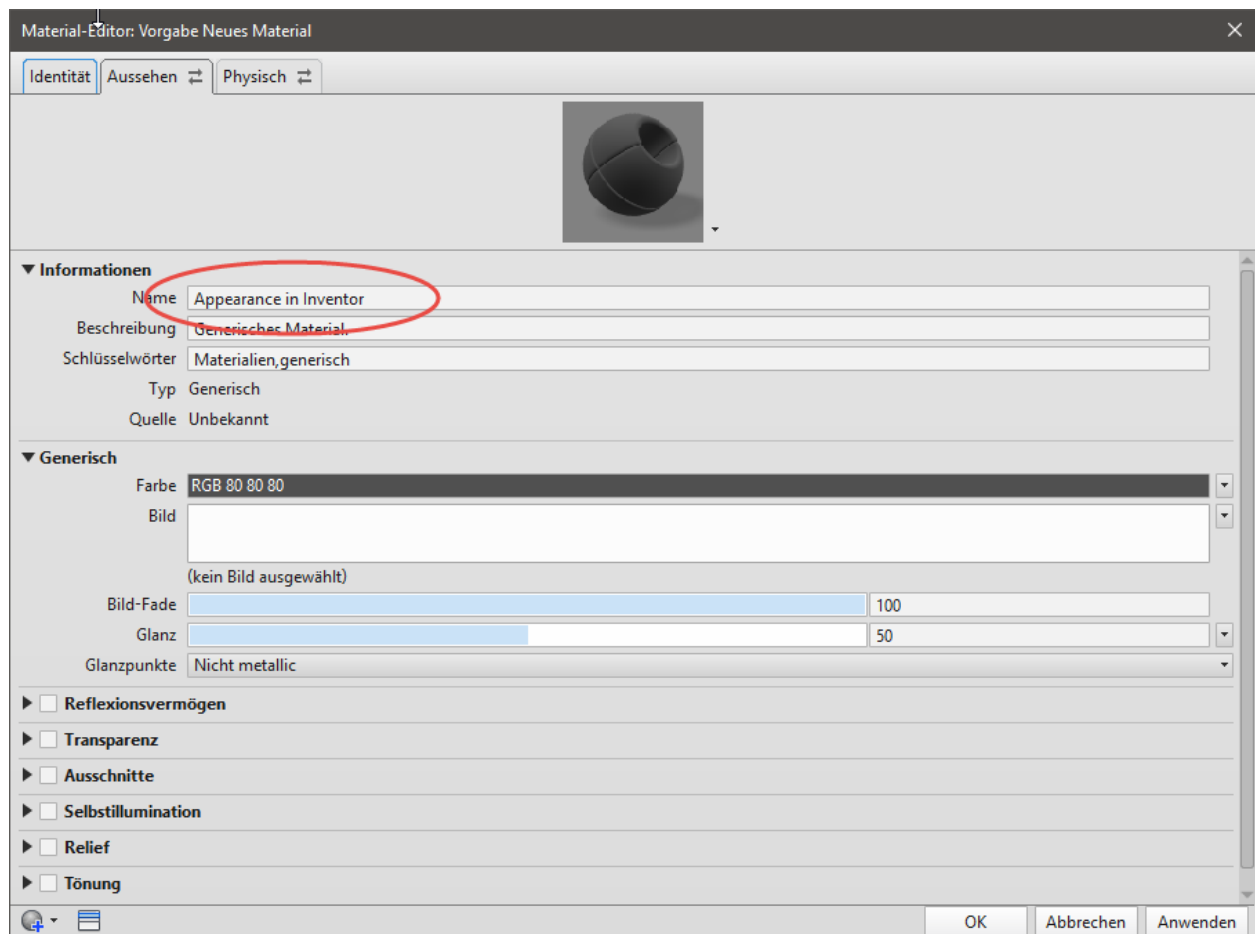
### 3 NEW MATERIAL LIBRARY



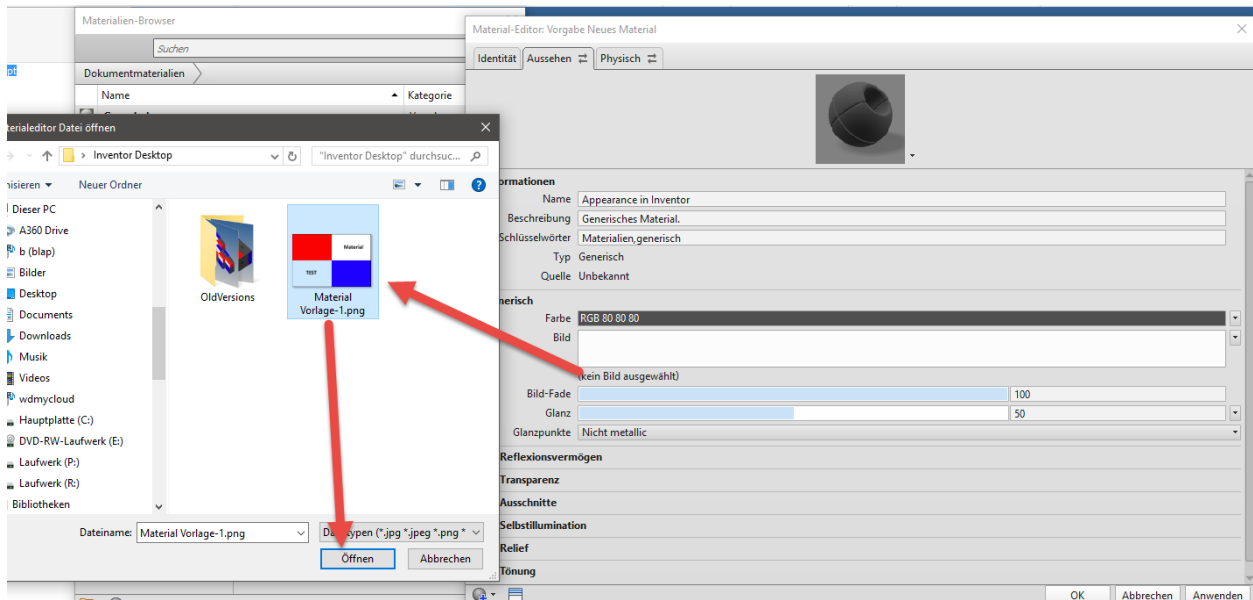
## 4 NEW MATERIAL



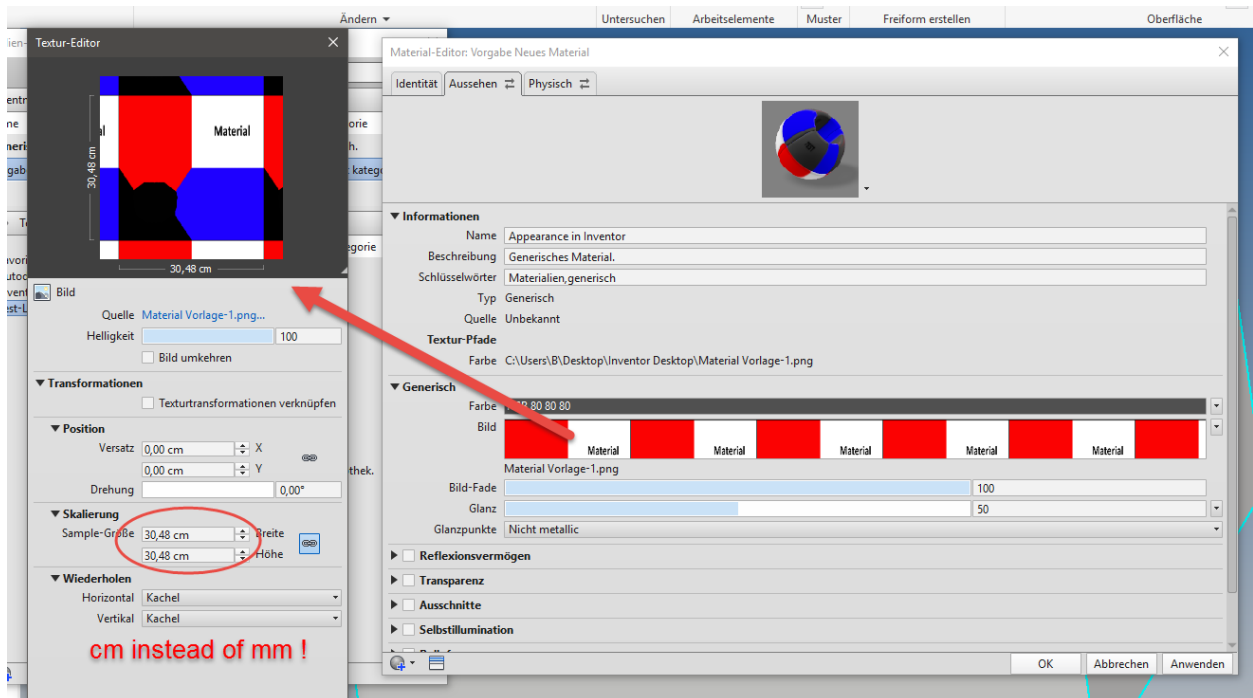
New Name, new Description etc. on Identity-Tab



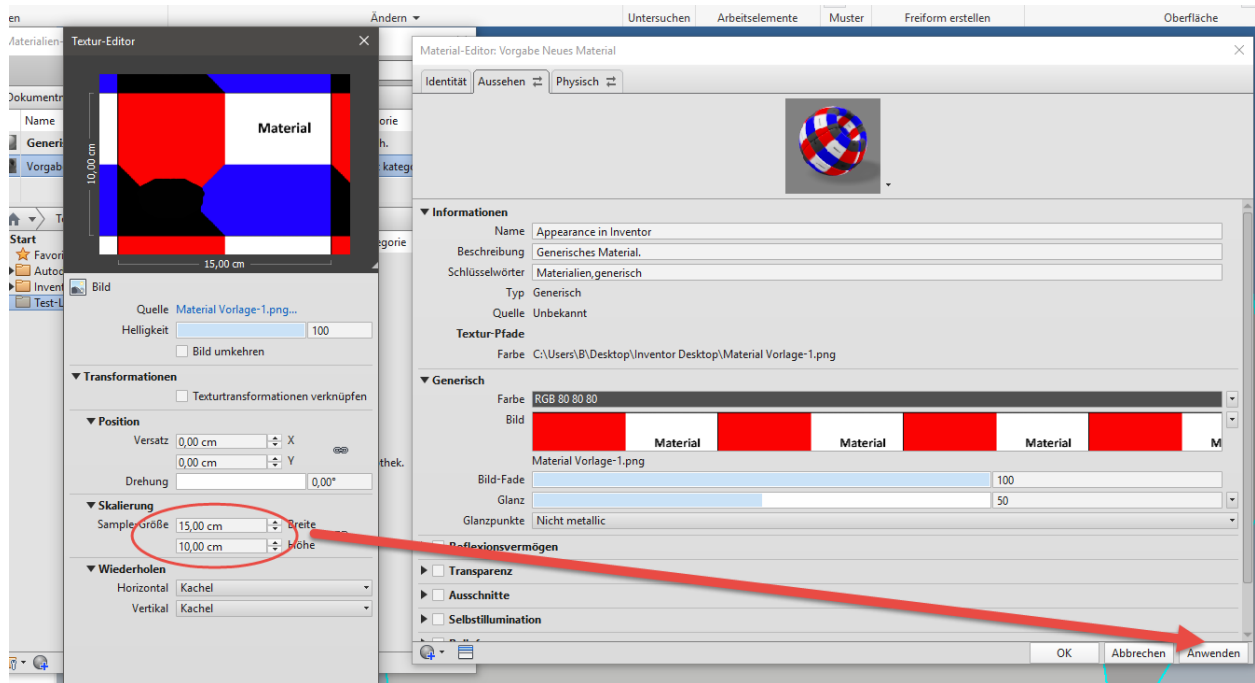
New Name on Appearance-Tab



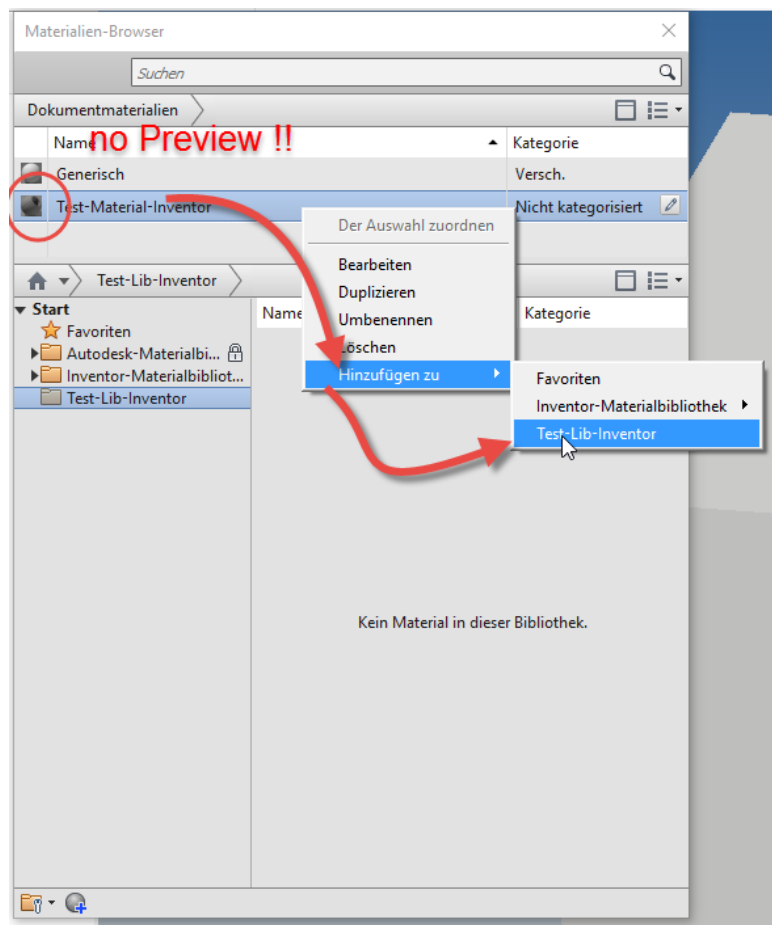
## New Bitmap



Size of Bitmap shown in cm instead of mm (Part Template is mm !!)



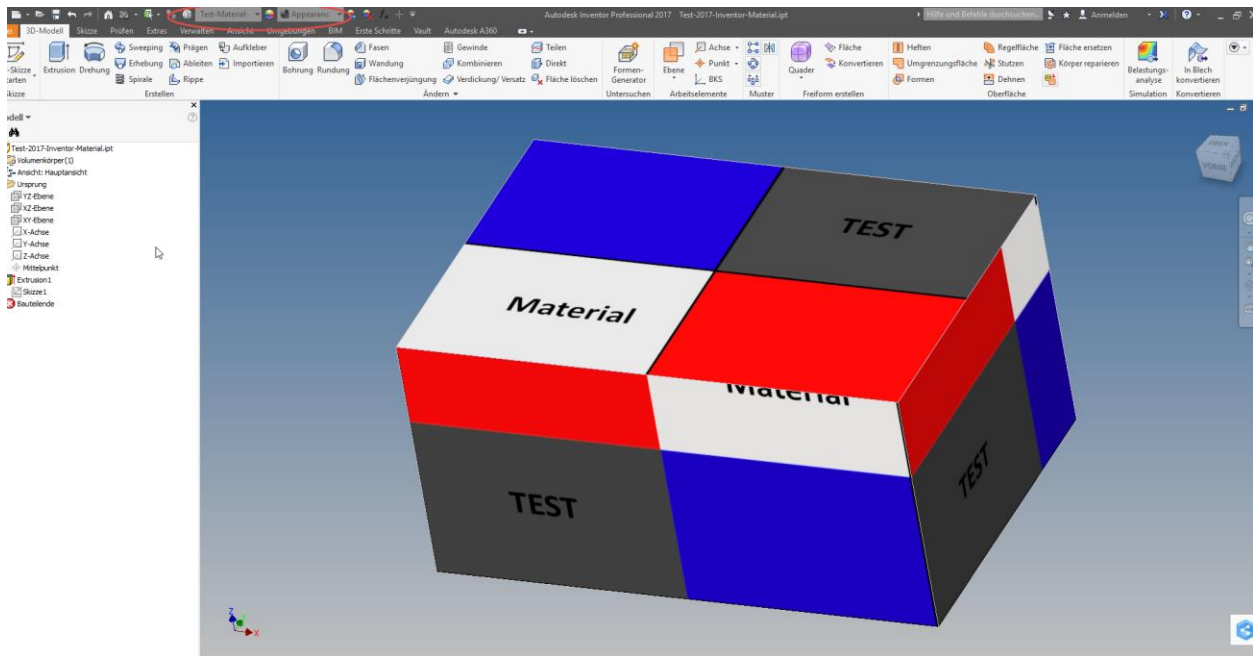
Size changed in 15x10cm



Export the Material into the new Library

(btw.: No Preview is shown)

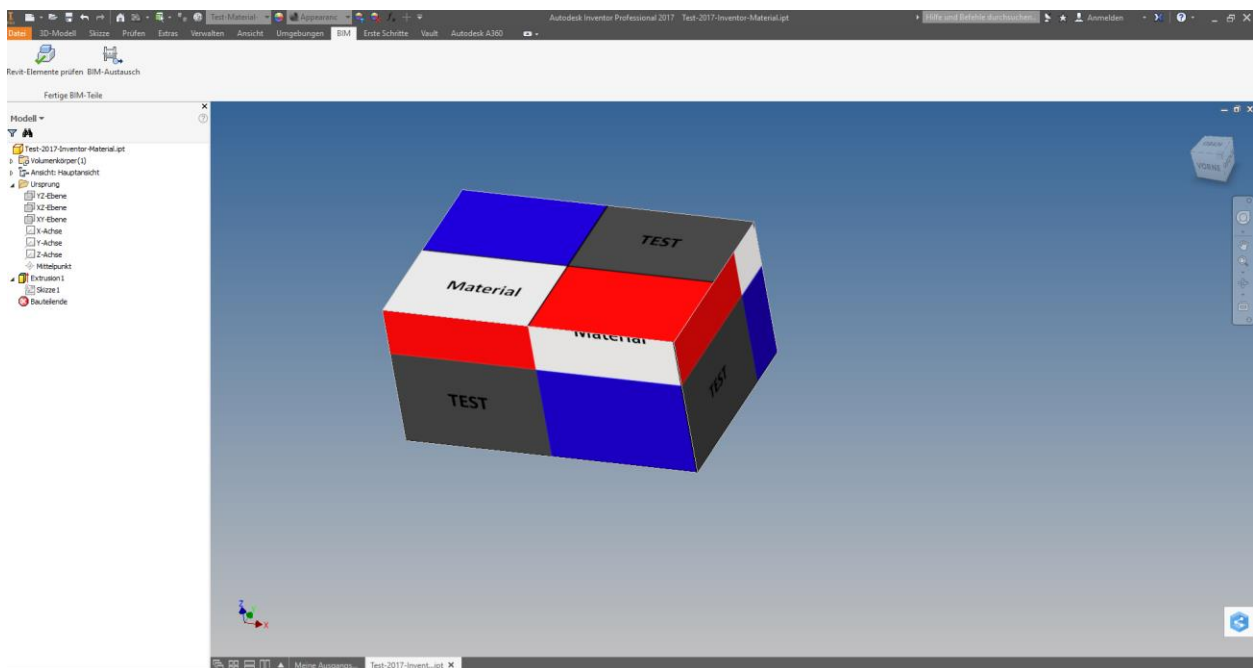


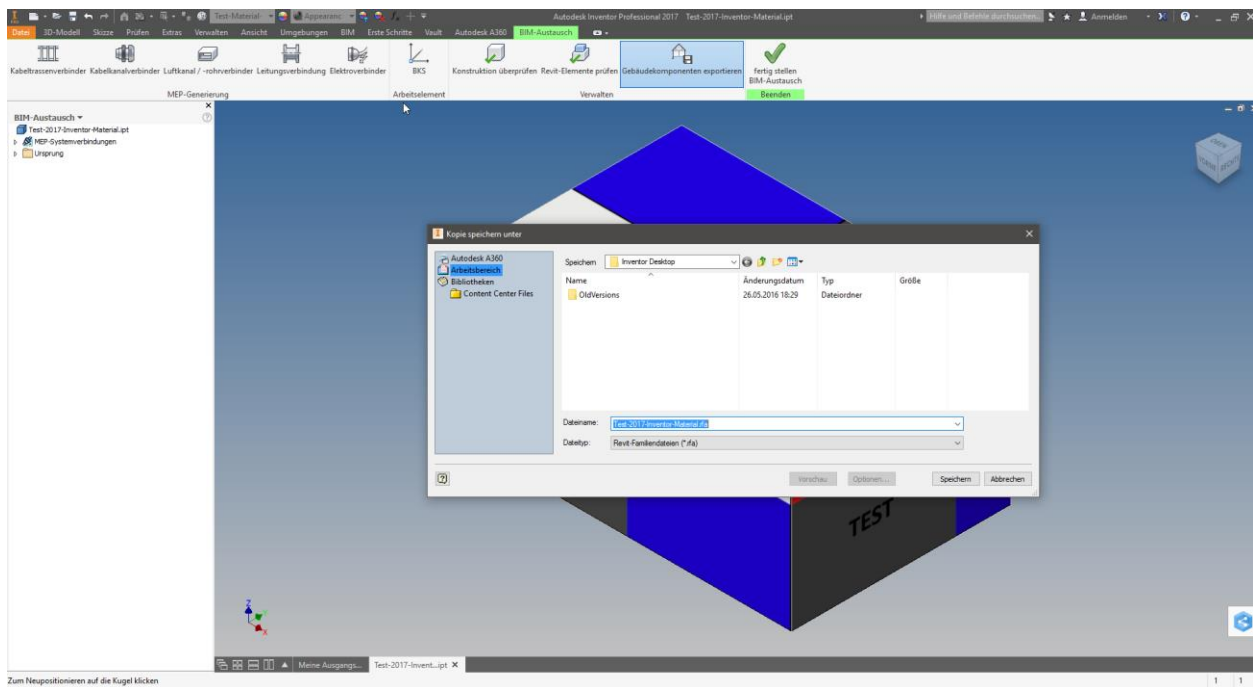
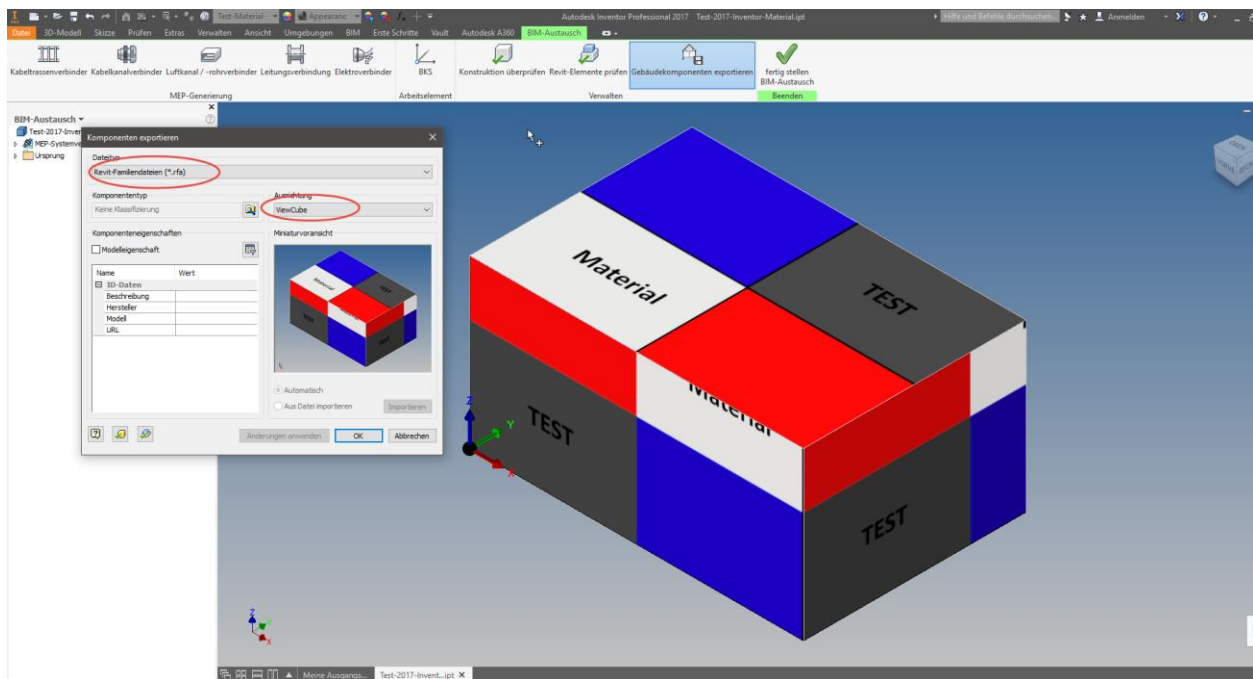


Add Material to the Part

I wonder: Why the Material Origin is not similar to the Origin of the Sketch (or of the Part)?

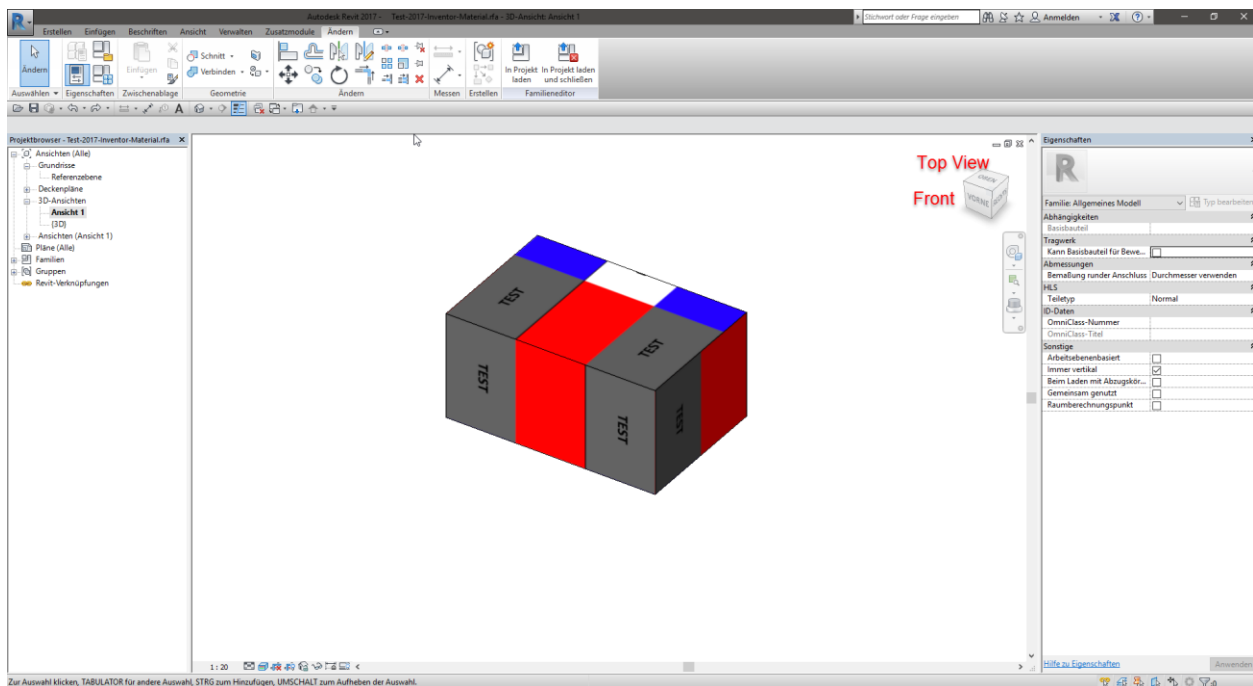
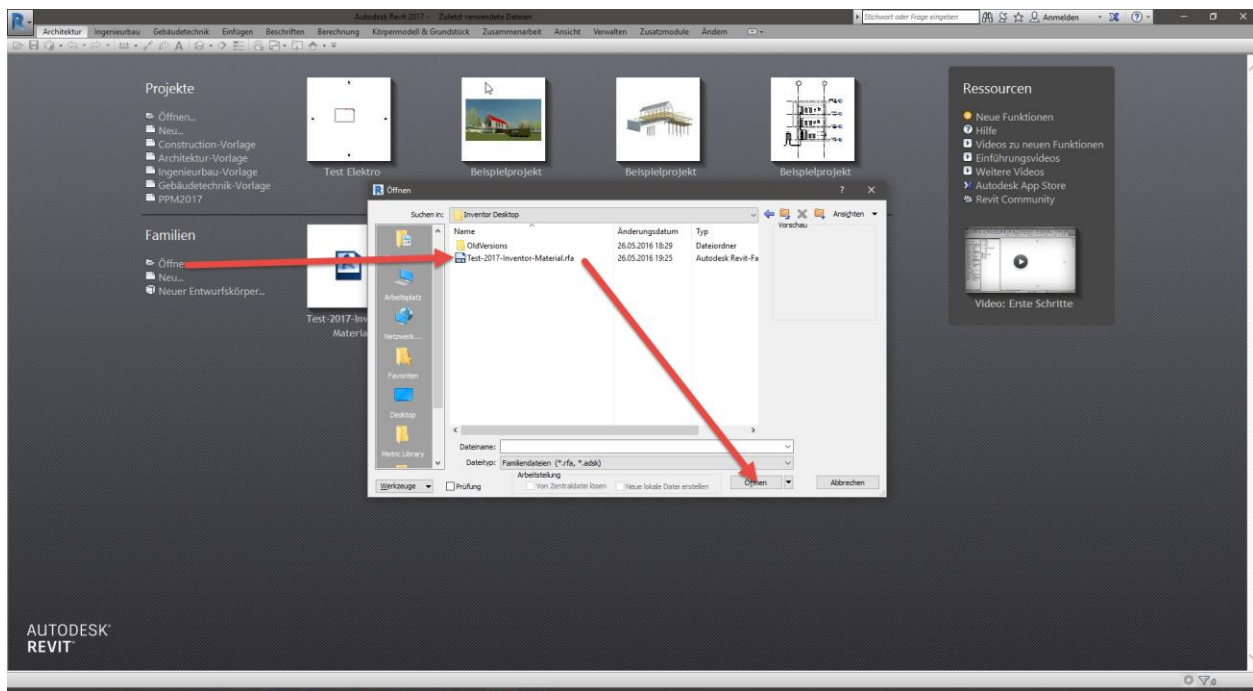
## 5 BIM EXPORT AS \*.RFA



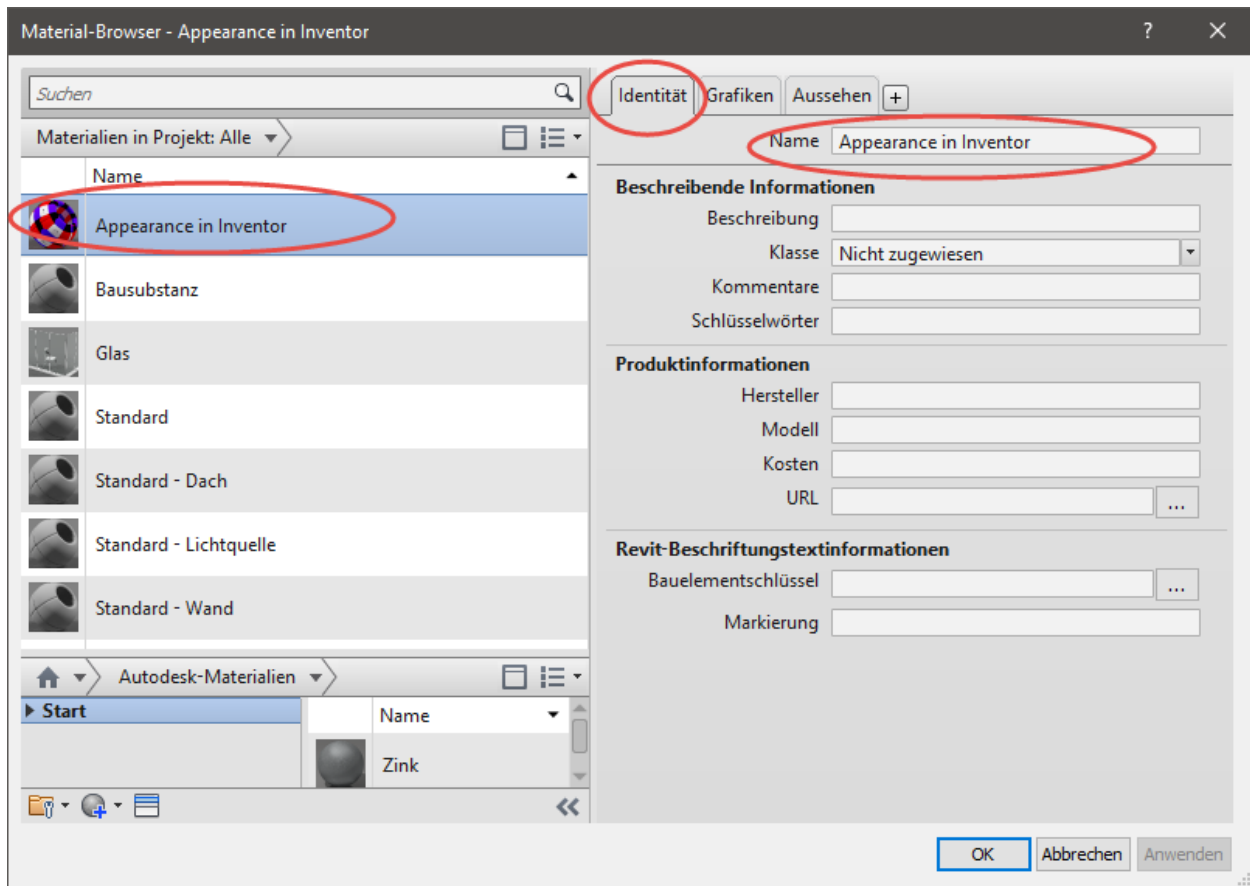


Part saved as **Test-2017-Inventor-Material.rfa**.

## 6 OPEN THE RFA-FILE WITH REVIT 2017

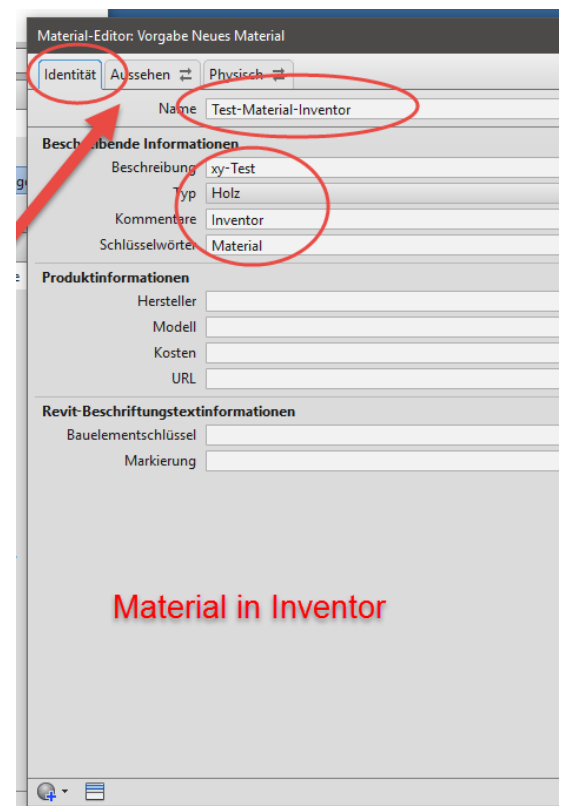
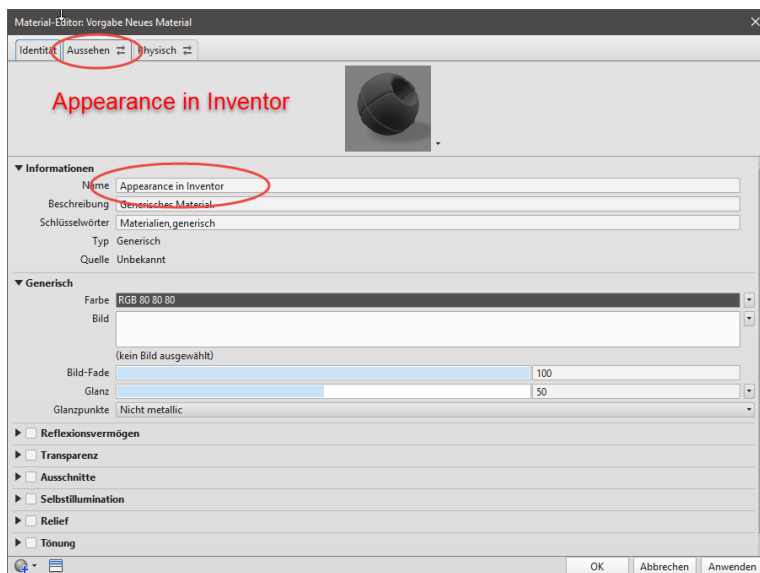


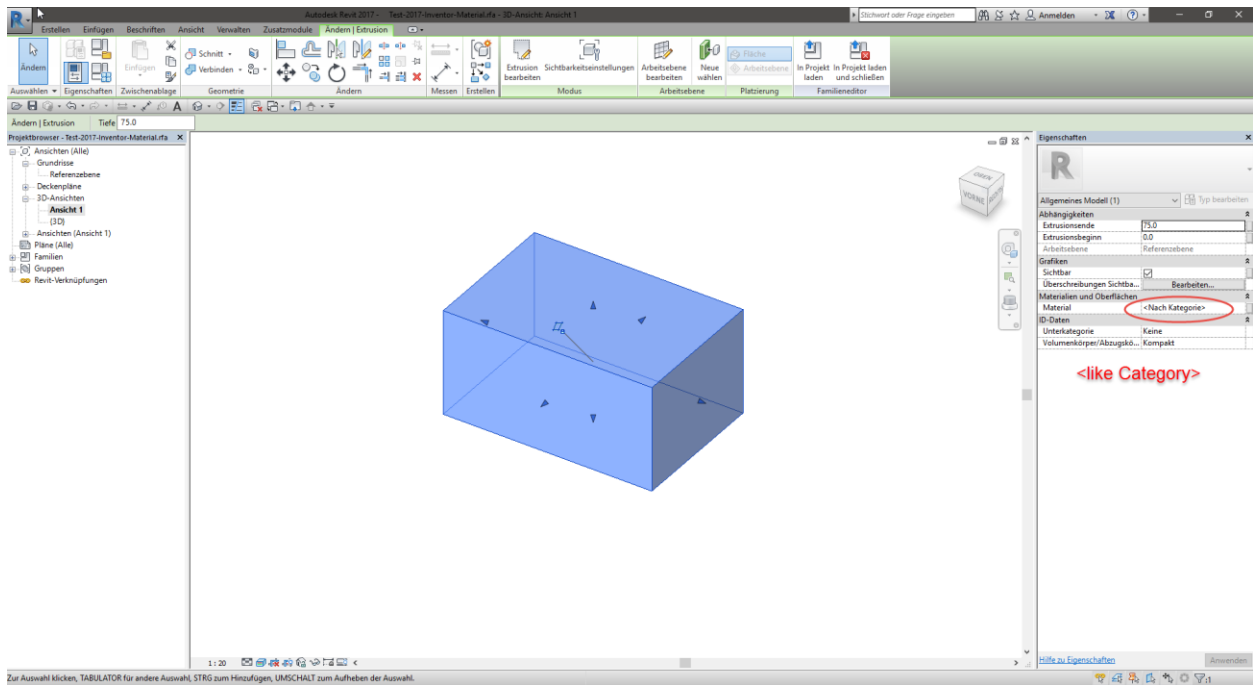
Material-Map is rotated by 90°



Wrong Material Name

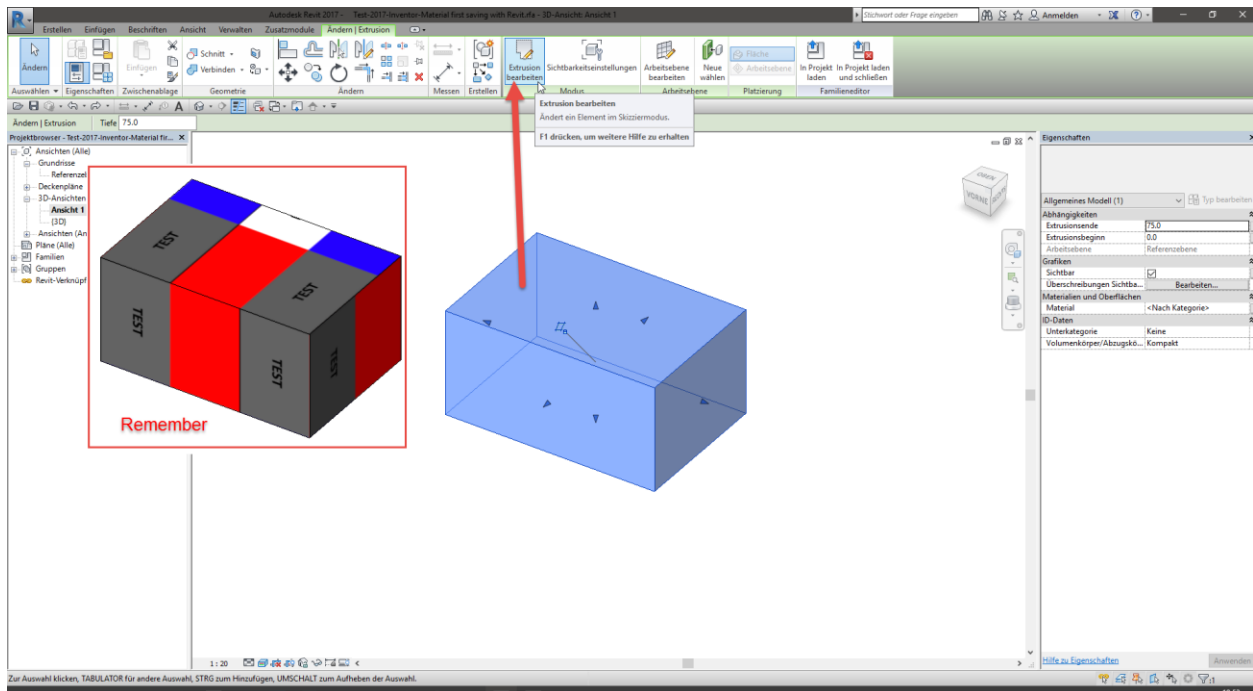
(Remember: ***This is the Name of the Appearance and not the Material Name given in Inventor!!!***)



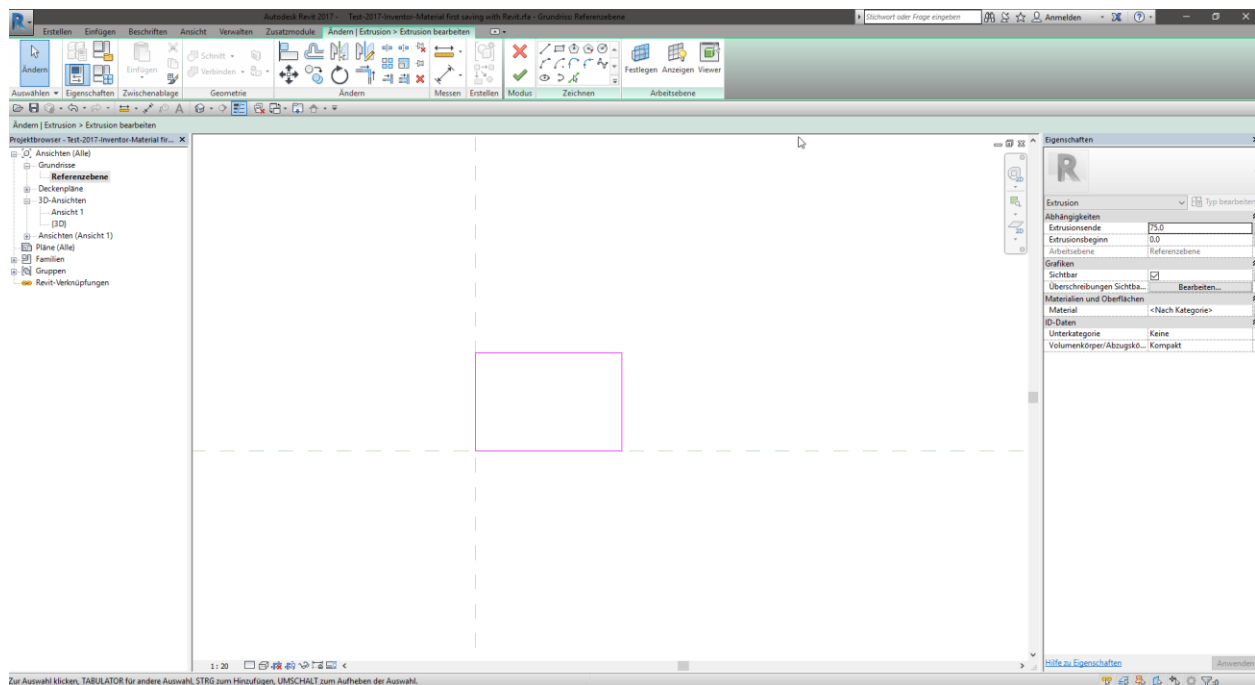
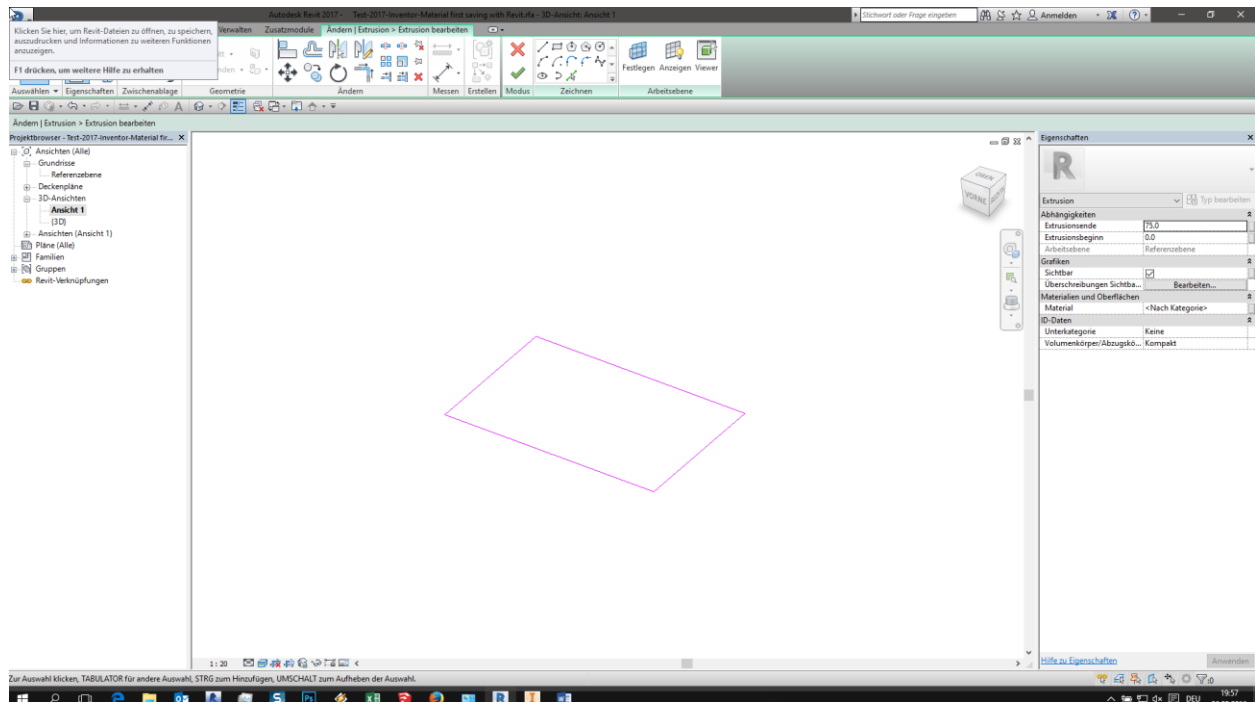


I wonder again: A Material is shown but no Material is link to the Extrusion or Body

Now I've saved this File as **Test-2017-Inventor-Material first saving with Revit.rfa**



I open the Extrusion

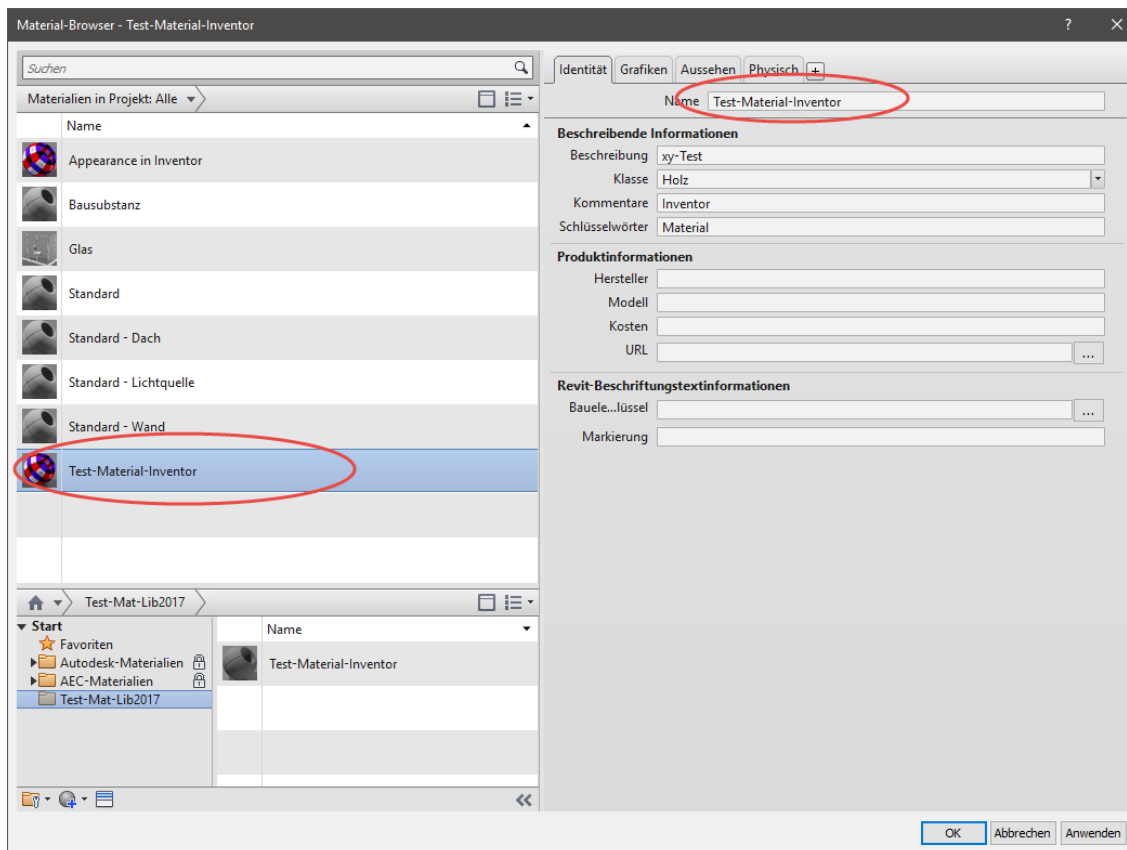
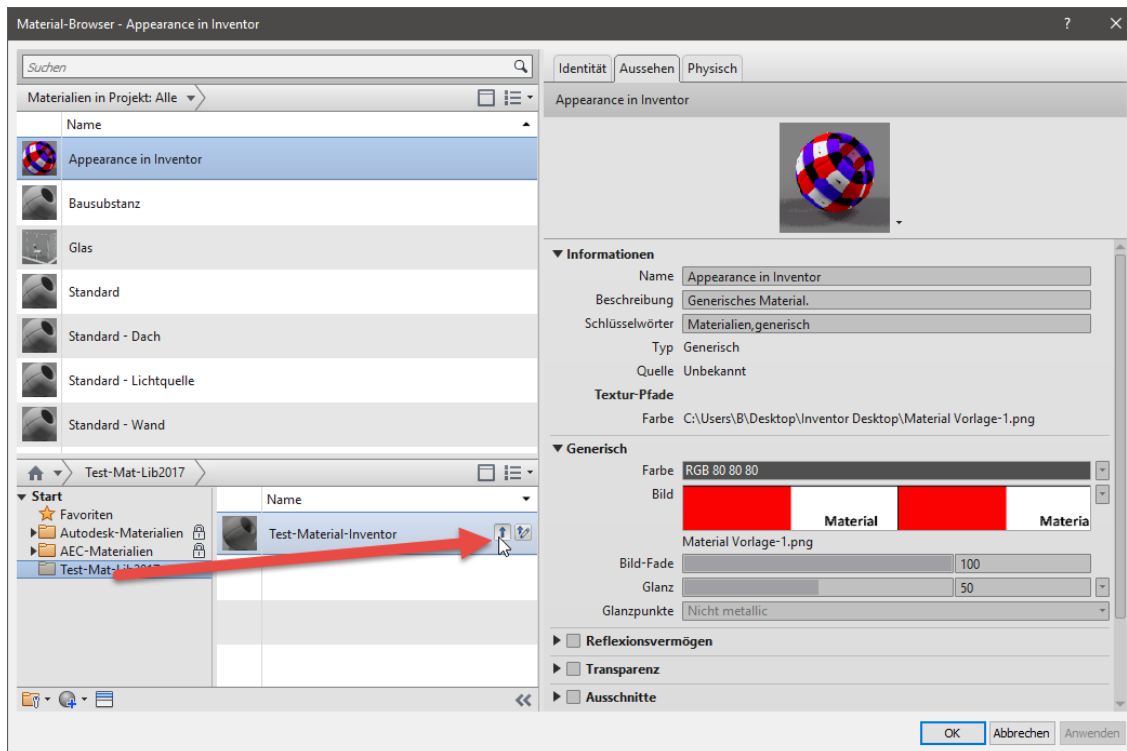


Sketch is on 0,0. That's fine ;)



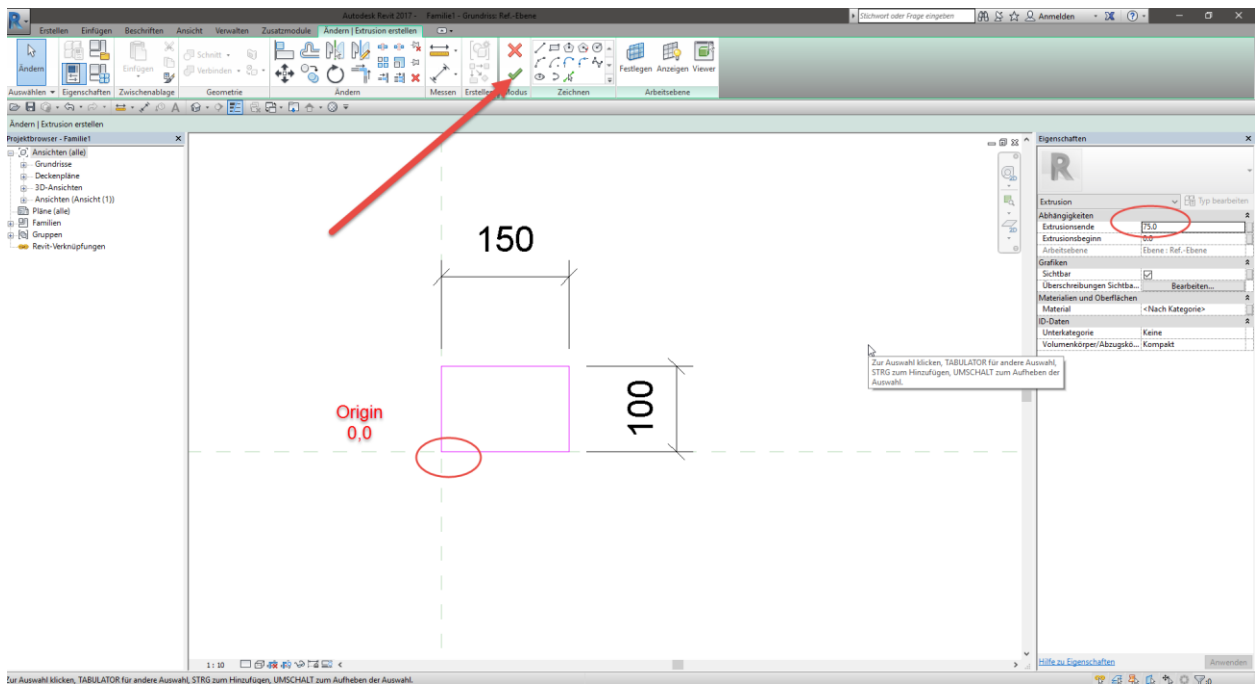
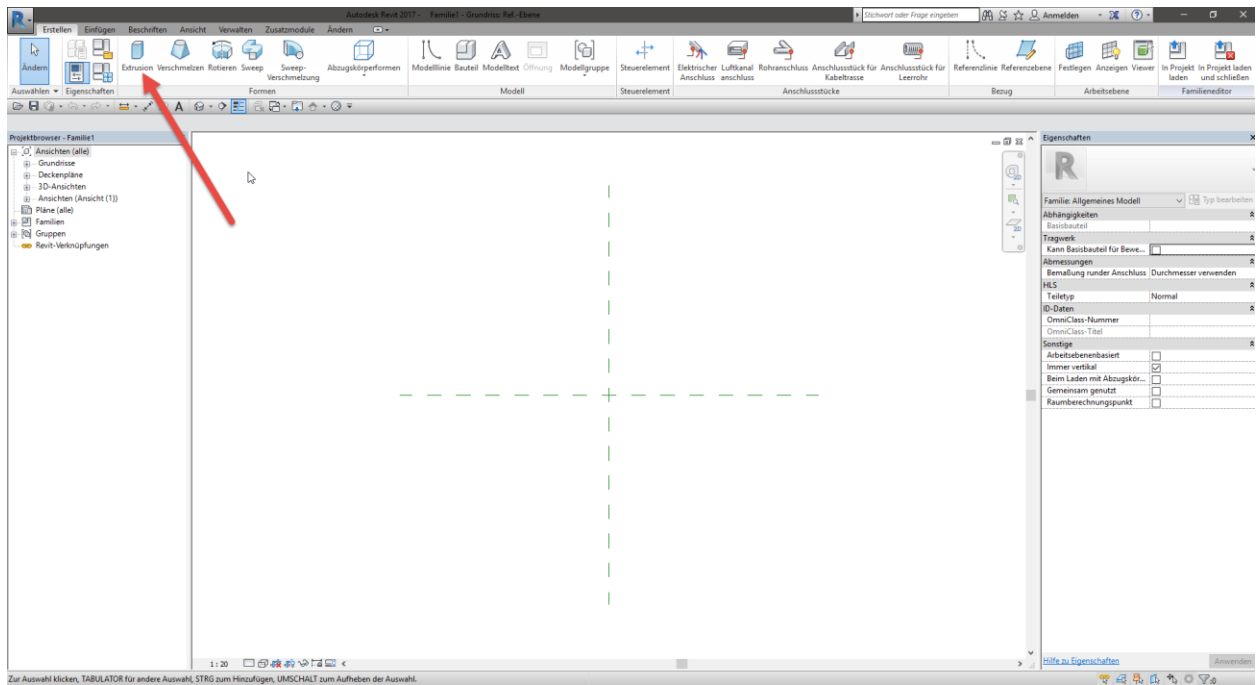


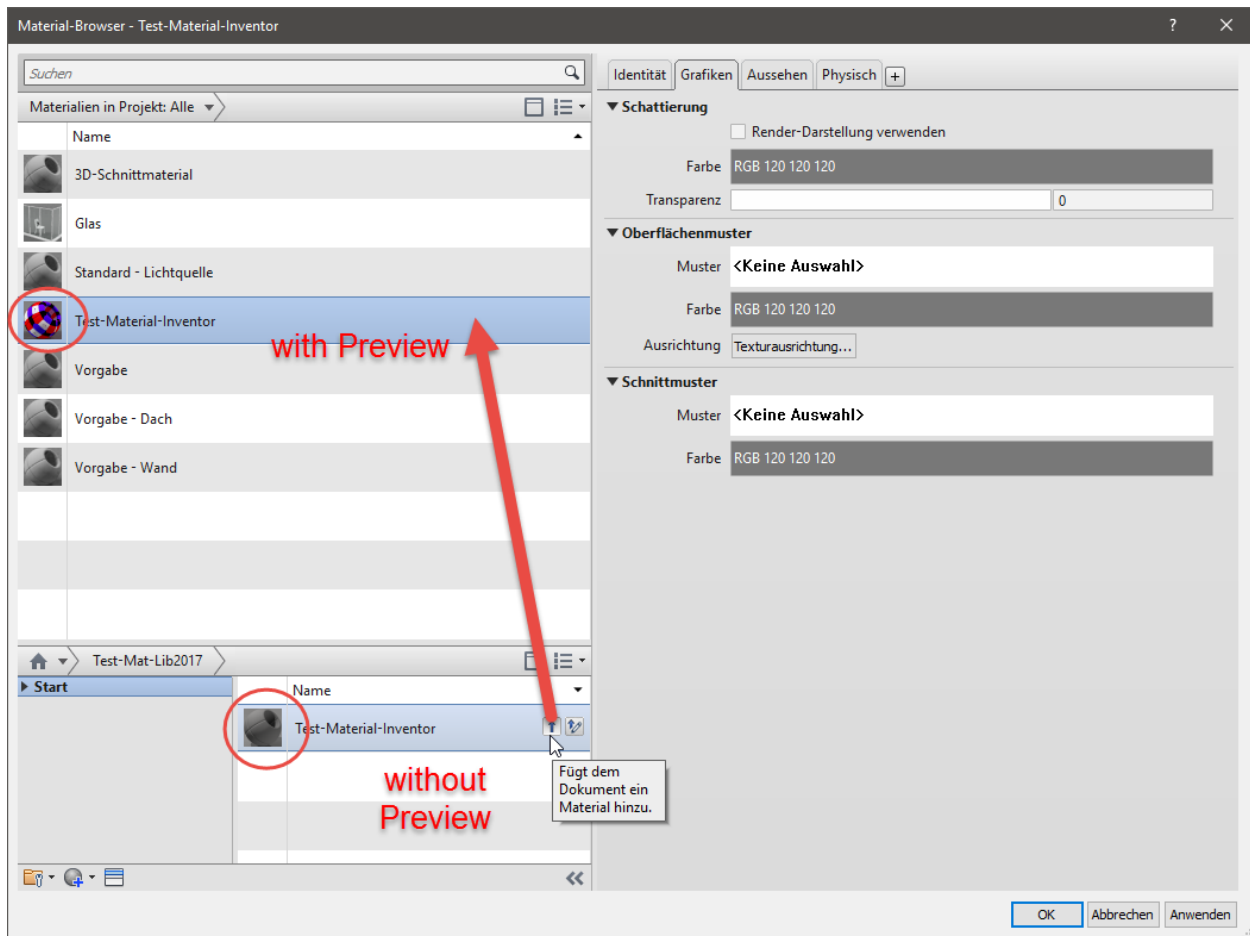
## 7 IMPORT MATERIAL FROM LIBRARY





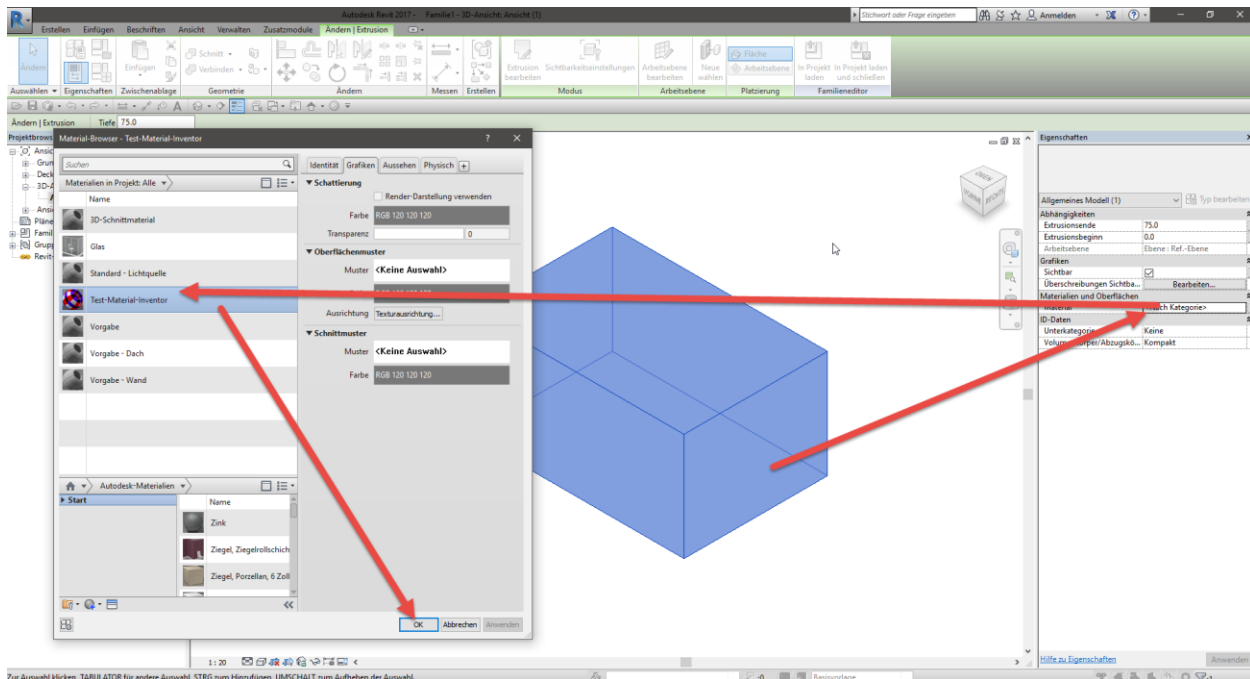




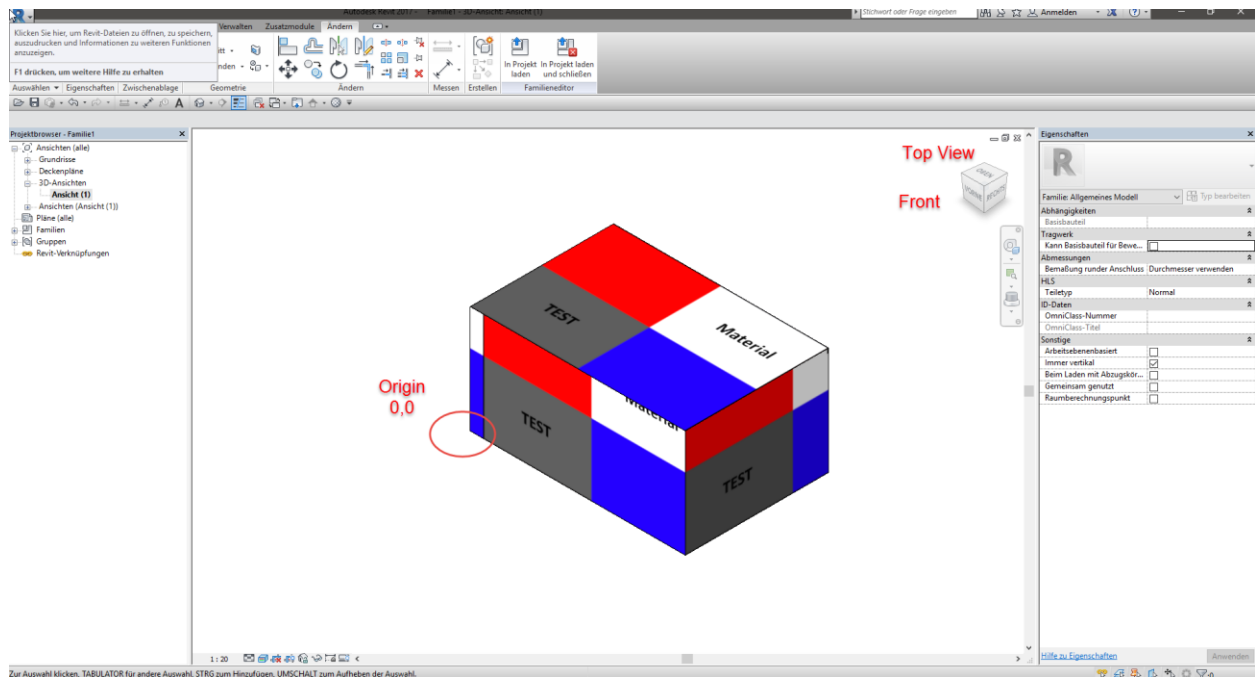


Import Material from Library.

**Note: In Library no Preview, in Project File Preview**

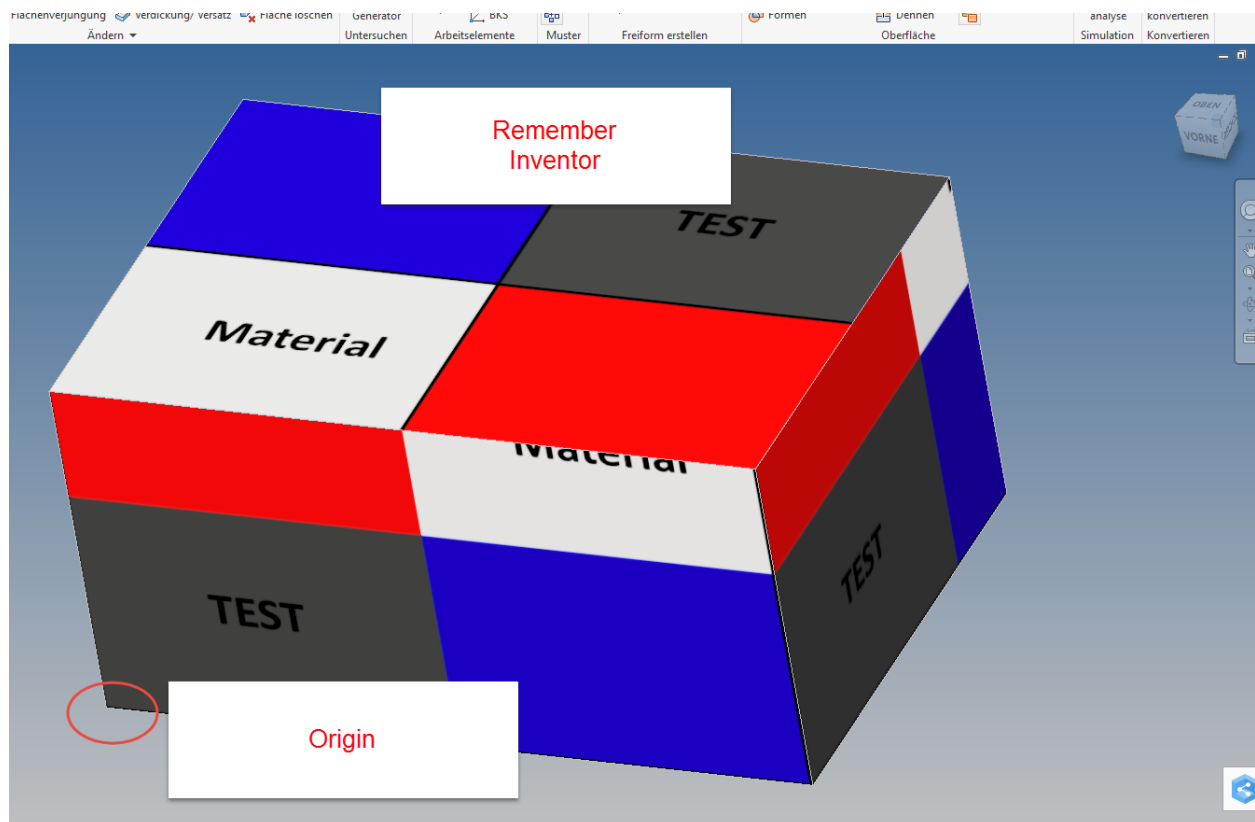


Add Material to Extrusion



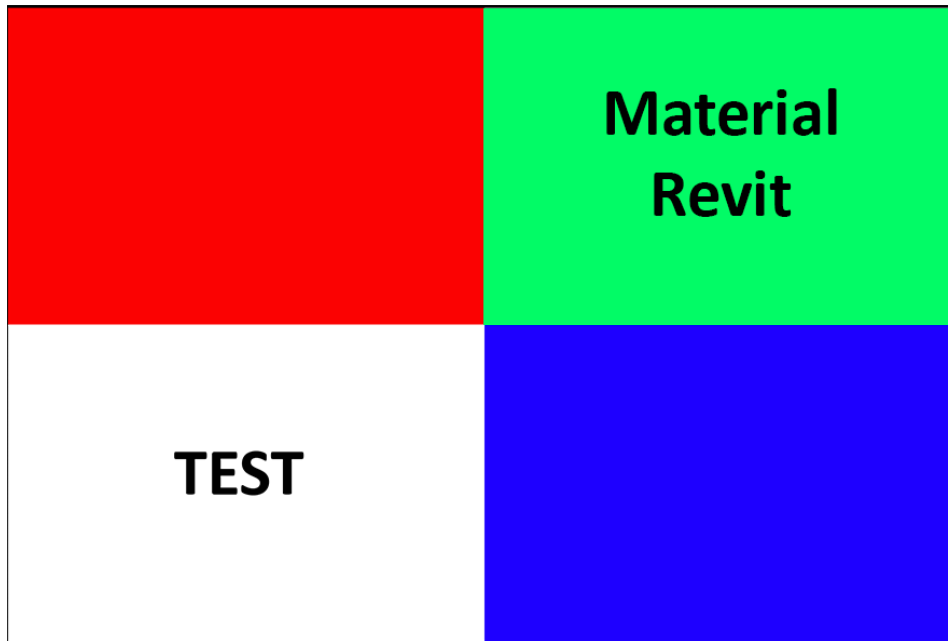
Now in Top View the Material starts from the Origin of the Sketch.  
**(Saved as Test-2017-Inventor-Material new Family.rfa)**

Remember how its look like in Inventor:

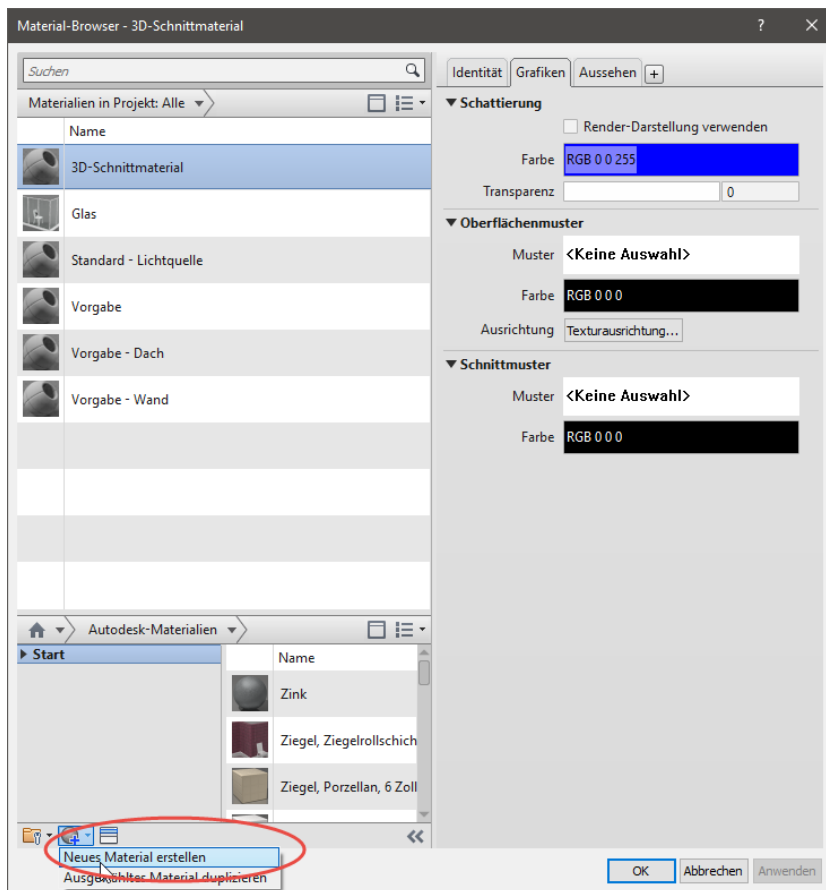


## 9 NEW MATERIAL IN REVIT

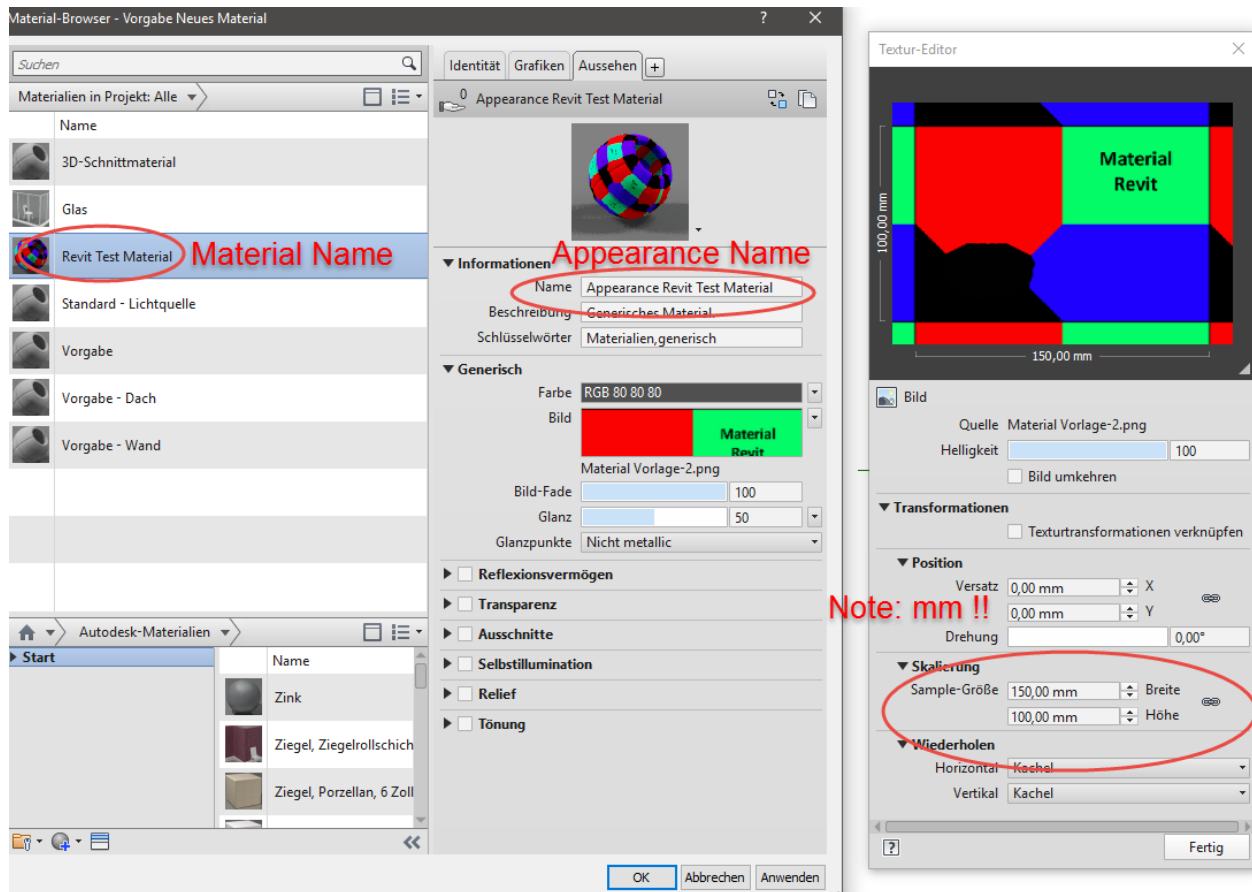
Create a new Material-Map in Photoshop



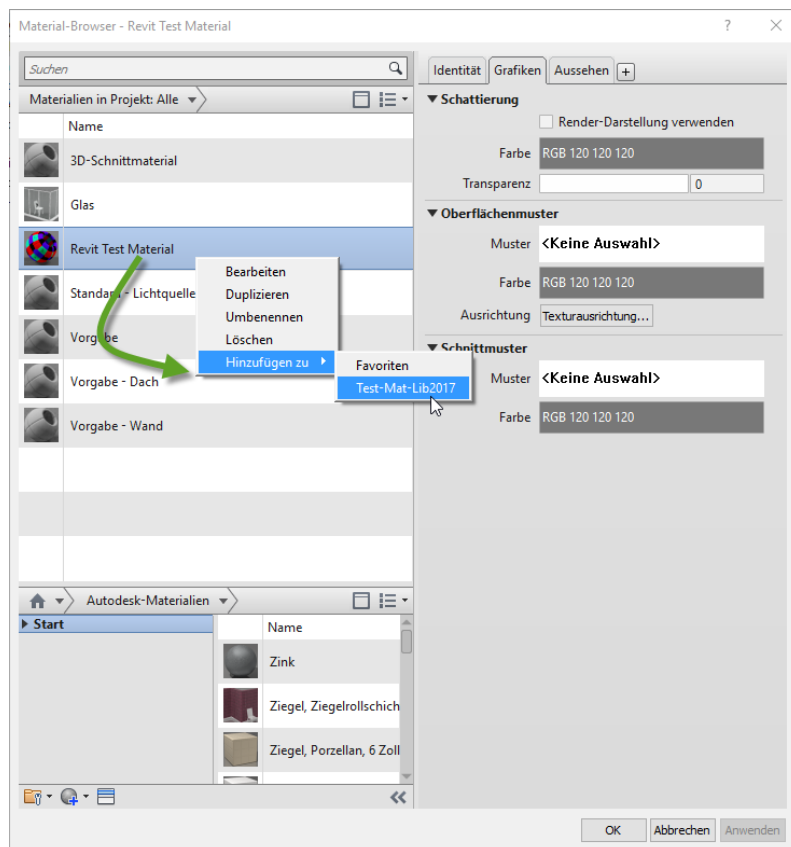
PNG 150x100mm, 150DPI Photoshop  
Start a new Family in Revit



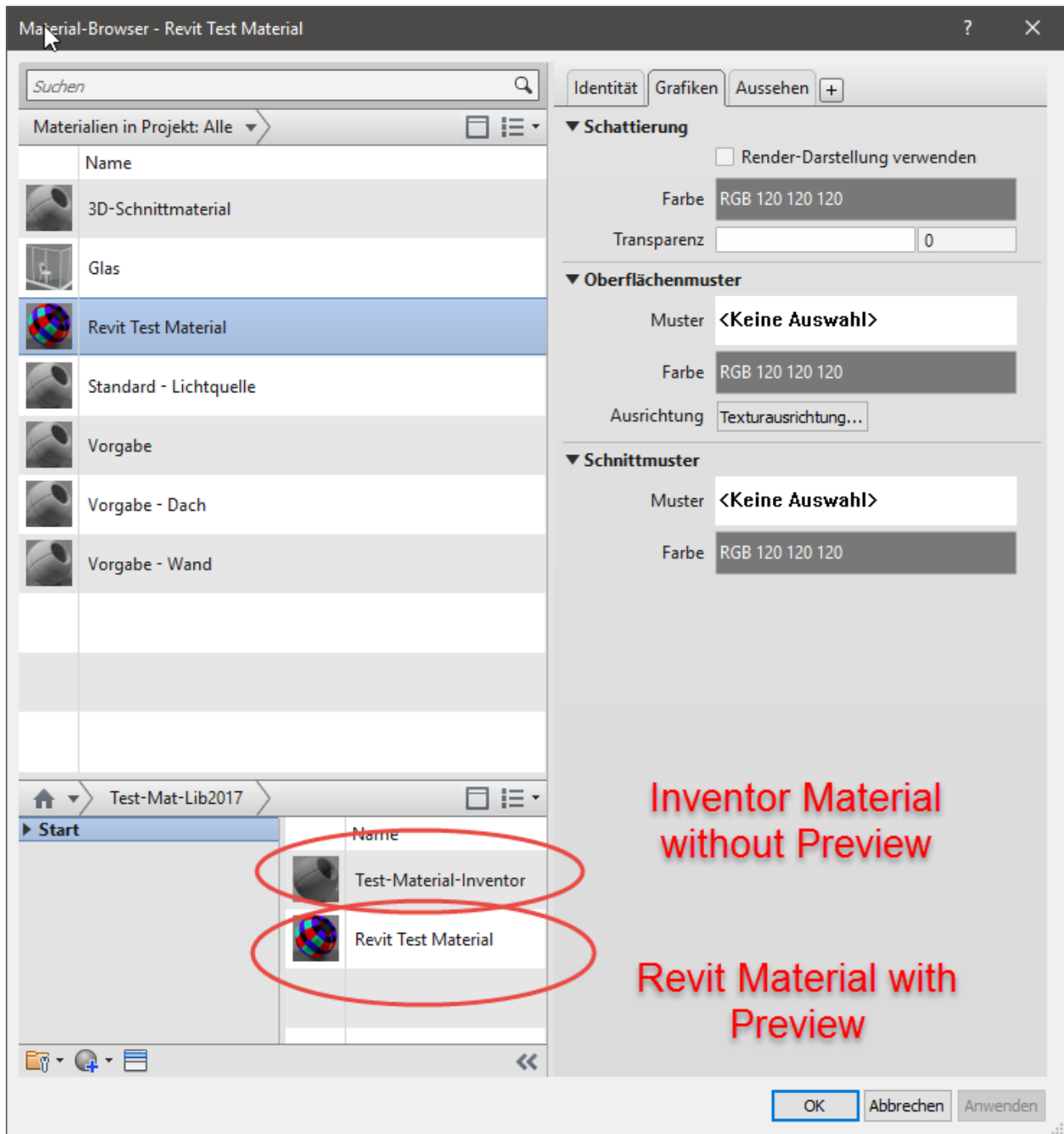
Create a new Material



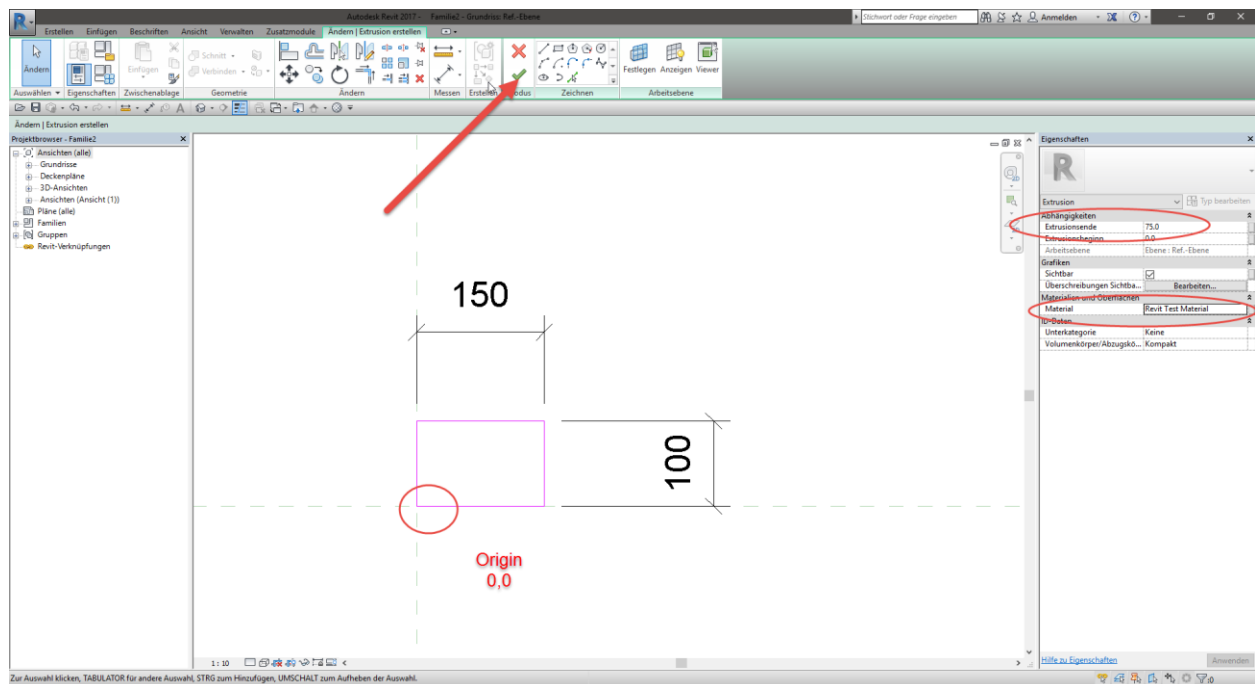
**Note: Map-Size is mm instead of cm in Inventor !**



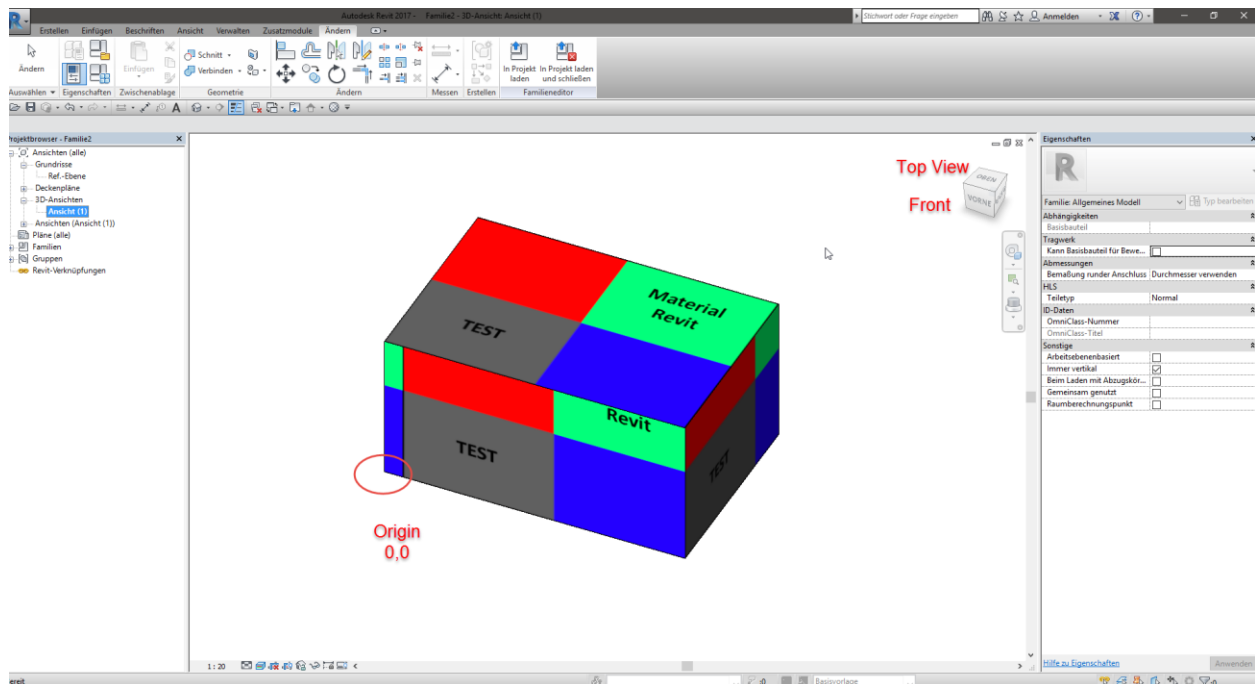
**Export to Mat-Library**



# 10 FAMILY WITH NEW MATERIAL



Starting a Sketch for Extrusion on 0,0 on Reference Level View, add Material

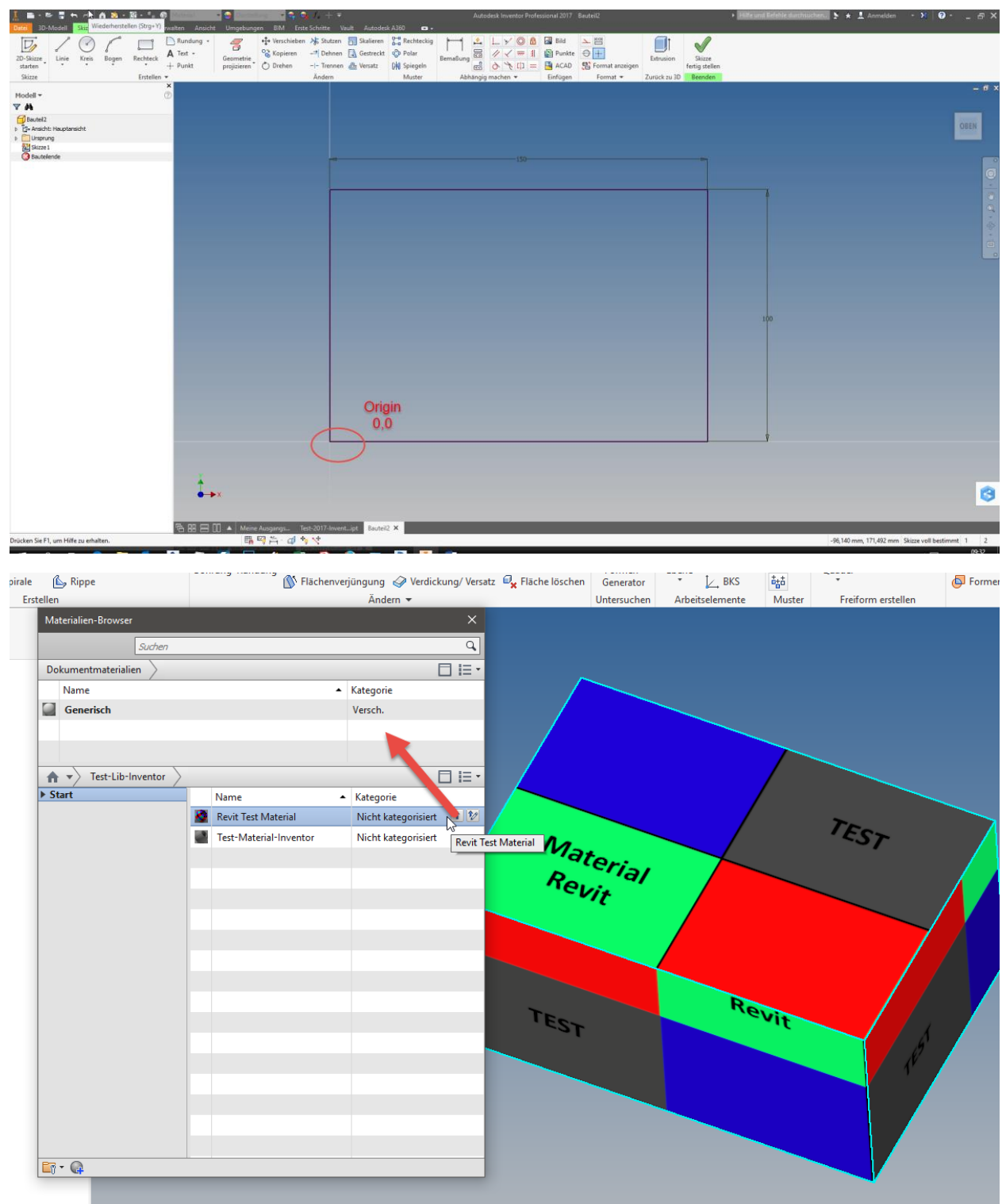


Everything is fine.

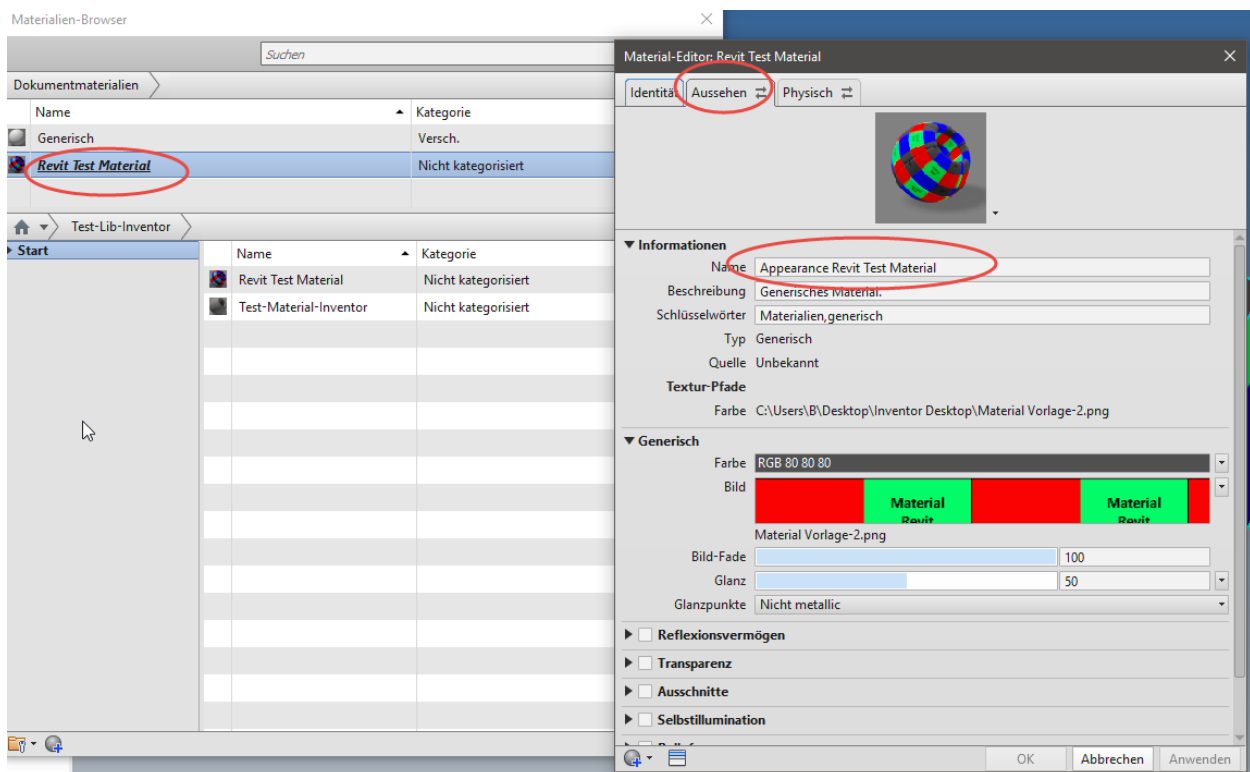
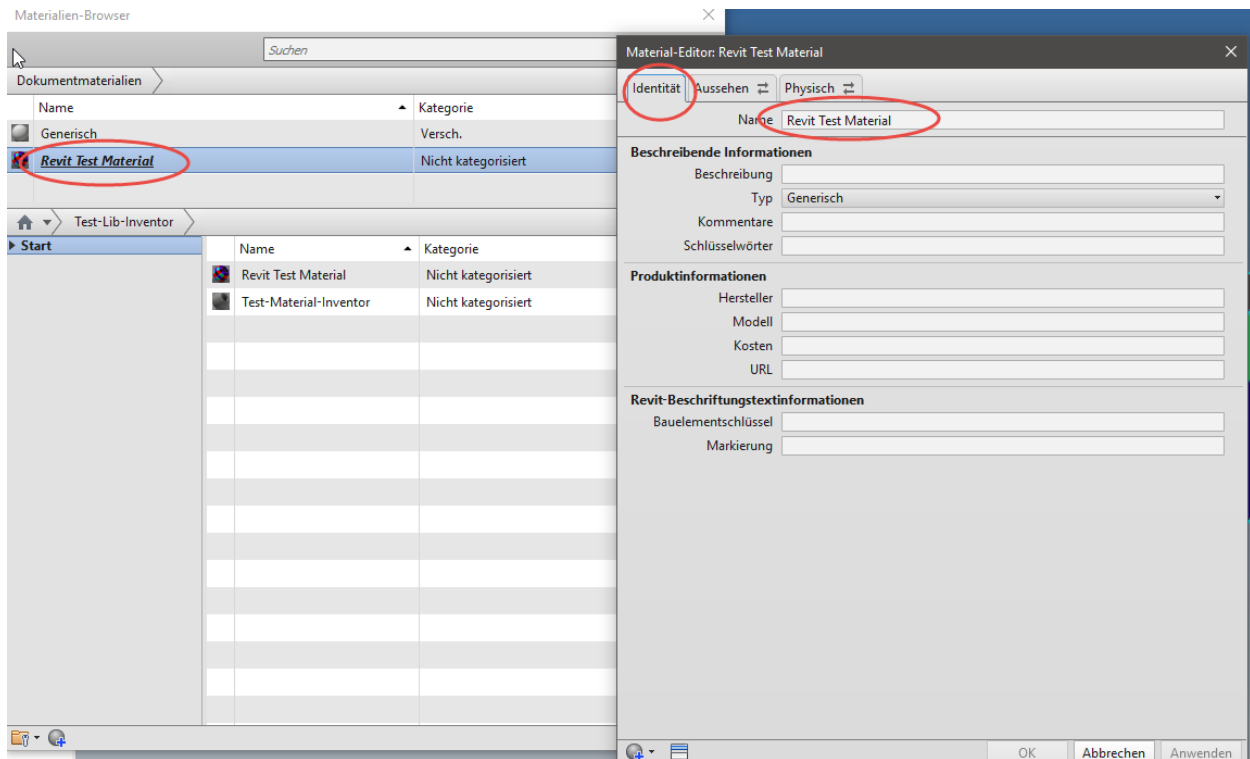
Saved as **Test-2017-Revit-Material.rfa**

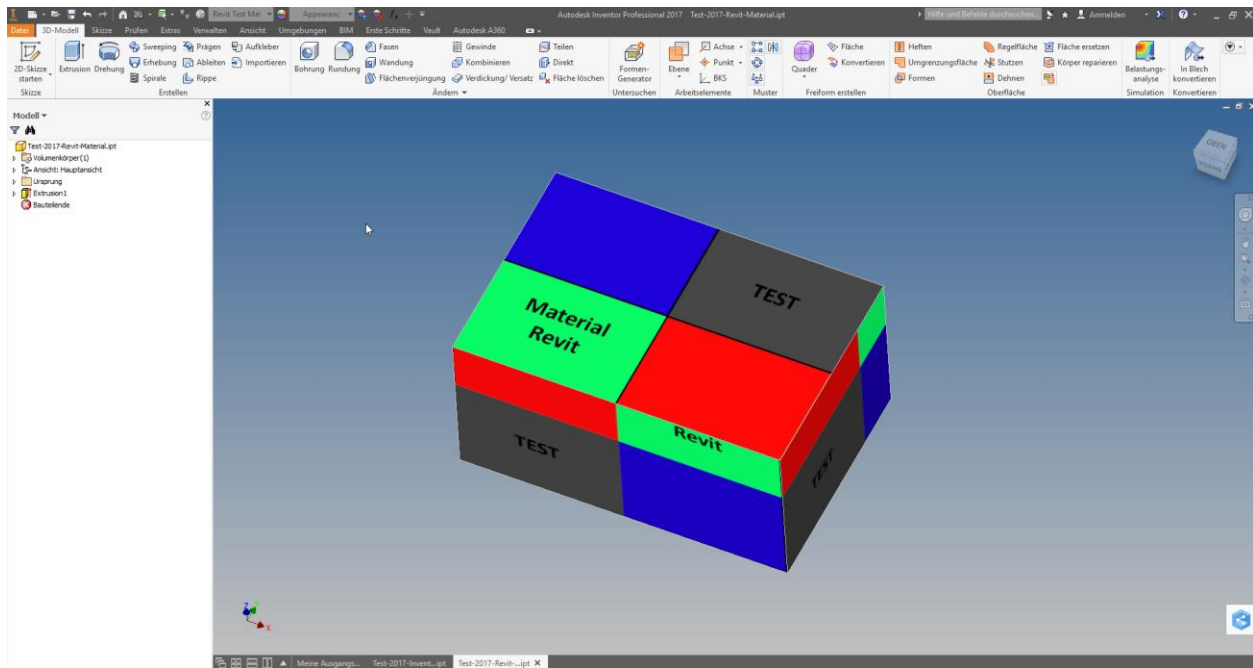


# 11 NEW INVENTOR PART WITH REVIT MATERIAL



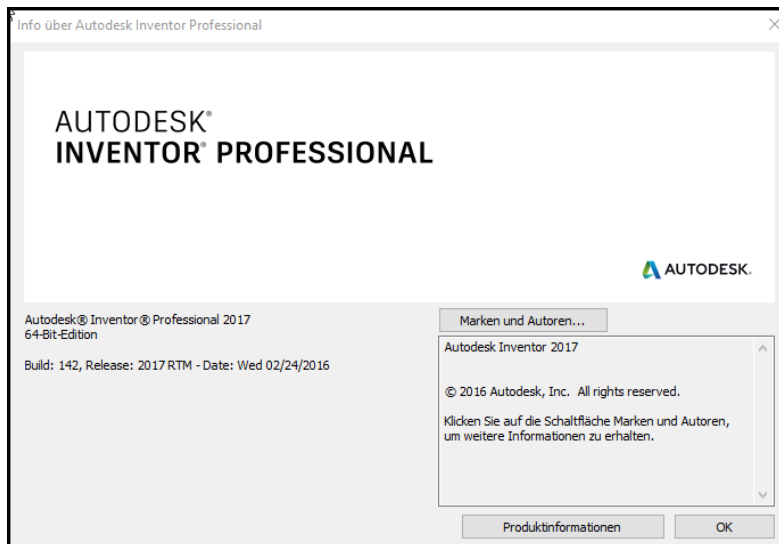
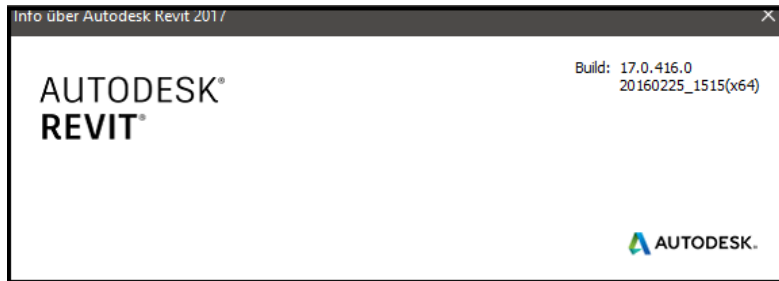
Add the Material to the Part, ignore “No physical Material”





Saved as **Test-2017-Revit-Material.ipt**

## 12 SYSTEM INFORMATION



### Windows-Edition

Windows 10 Home

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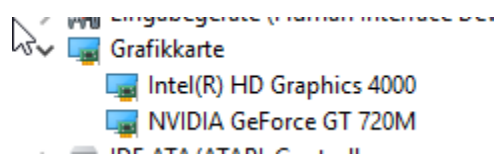
### System

Prozessor: Intel(R) Core(TM) i7-3537U CPU @ 2.00GHz 2.50 GHz  
Installierter Arbeitsspeicher 8,00 GB (7,88 GB verwendbar)  
(RAM):  
Systemtyp: 64-Bit-Betriebssystem, x64-basierter Prozessor  
Stift- und Toucheingabe: Für diese Anzeige ist keine Stift- oder Toucheingabe verfügbar.



**lenovo.**

[Supportinformationen](#)



# 13 SUBMITTED FILES

Extrahieren nach							
Dieser PC > Desktop > Inventor Desktop > Test-Revit-Inventor-2017.zip							
Name	Typ	Komprimierte Größe	Kennwortg...	Größe	Verhältnis	Änderungsdatum	
Test-Revit-Inventor-2017.zip							
Material Vorlage-1.png	PNG-Datei	23 KB	Nein	39 KB	43%	26.05.2016 18:16	
Material Vorlage-2.png	PNG-Datei	21 KB	Nein	37 KB	45%	27.05.2016 09:04	
Test-2017-Inventor-Material first saving with Revit.rfa	Autodesk Revit-Familie	272 KB	Nein	304 KB	11%	26.05.2016 19:52	
Test-2017-Inventor-Material new Family.rfa	Autodesk Revit-Familie	311 KB	Nein	344 KB	10%	27.05.2016 08:57	
Test-2017-Inventor-Material second saving with Revit.rfa	Autodesk Revit-Familie	272 KB	Nein	304 KB	11%	27.05.2016 08:20	
Test-2017-Inventor-Material.html	Firefox HTML Document	3 KB	Nein	18 KB	86%	26.05.2016 19:25	
Test-2017-Inventor-Material.ipt	Autodesk Inventor-Bauteil	69 KB	Nein	97 KB	30%	27.05.2016 10:09	
Test-2017-Inventor-Material.rfa	Autodesk Revit-Familie	246 KB	Nein	276 KB	12%	26.05.2016 19:25	
Test-2017-Revit-Material.ipt	Autodesk Inventor-Bauteil	67 KB	Nein	94 KB	29%	27.05.2016 10:09	
Test-2017-Revit-Material.rfa	Autodesk Revit-Familie	326 KB	Nein	360 KB	10%	27.05.2016 09:30	
Test-Lib-Inventor.adsklib	ADSKLIB-Datei	61 KB	Nein	96 KB	37%	27.05.2016 09:17	