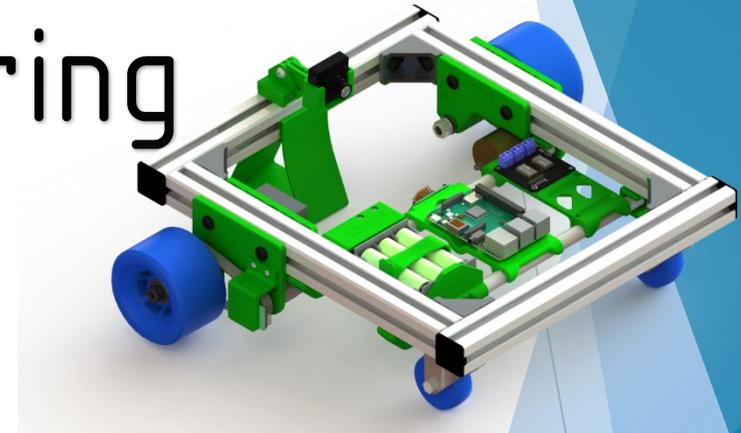


# SCUTTLE Rendering Guide

Revision 2022.10.31

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# In this Guide:



- ▶ Selecting Colors
- ▶ Finding files for appearance & lighting
- ▶ Texture mapping in Solidworks, for renderings
- ▶ Achieving renderings like real 3D Printed parts

# Quick Reference:



## Material File

- Example: green-pw-mt11050.p2m
- Commonly stored with your assembly
- Contains colors/textures within

## Appearance File

- Need to explore
- Can be carried by Material

## Material Favorites

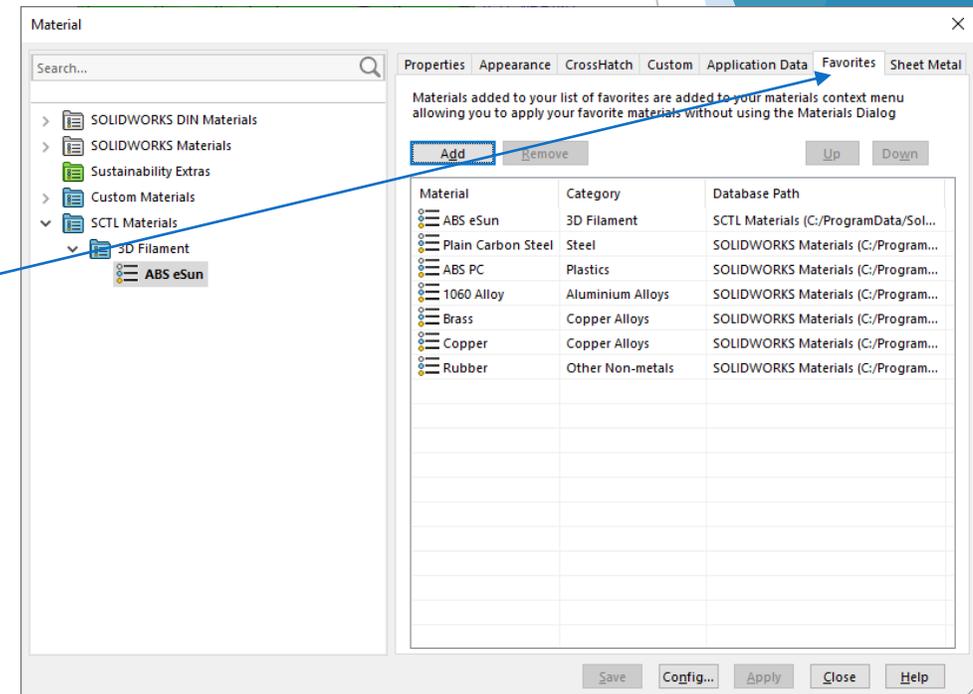
- Find material in feature tree
- Right click ► edit material
- Find the Favorites tab inside the Material dialogue box

## Environment File

- Impacts the rendering but not the part.
- Default location: Program Files\SOLIDWORKS Corp\SOLIDWORKS\data\images\textures\background
- Example: Kitchen.hdr

## Scene File

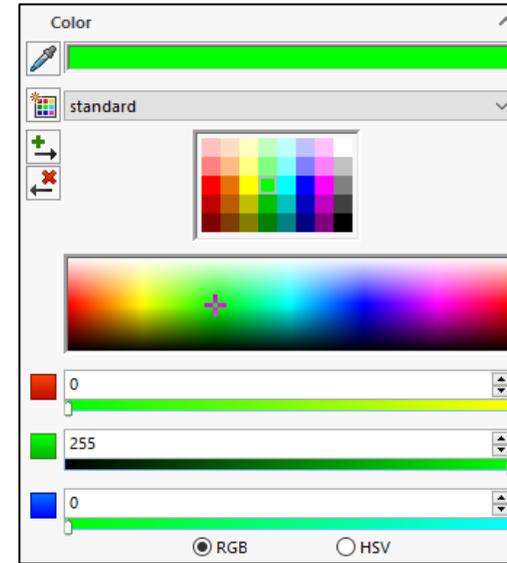
- Carried by environment?
- Example: 11 white kitchen.p2s
- Contains settings for PhotoView360 lighting



# Colors



- ▶ Find the color of the material:
  - ▶ Select material ▶ advanced ▶ color/image ▶
  - ▶ Green from standard color swatch: R-G-B = 0-255-0
  - ▶ Equivalent HSV = 120, 100, 100

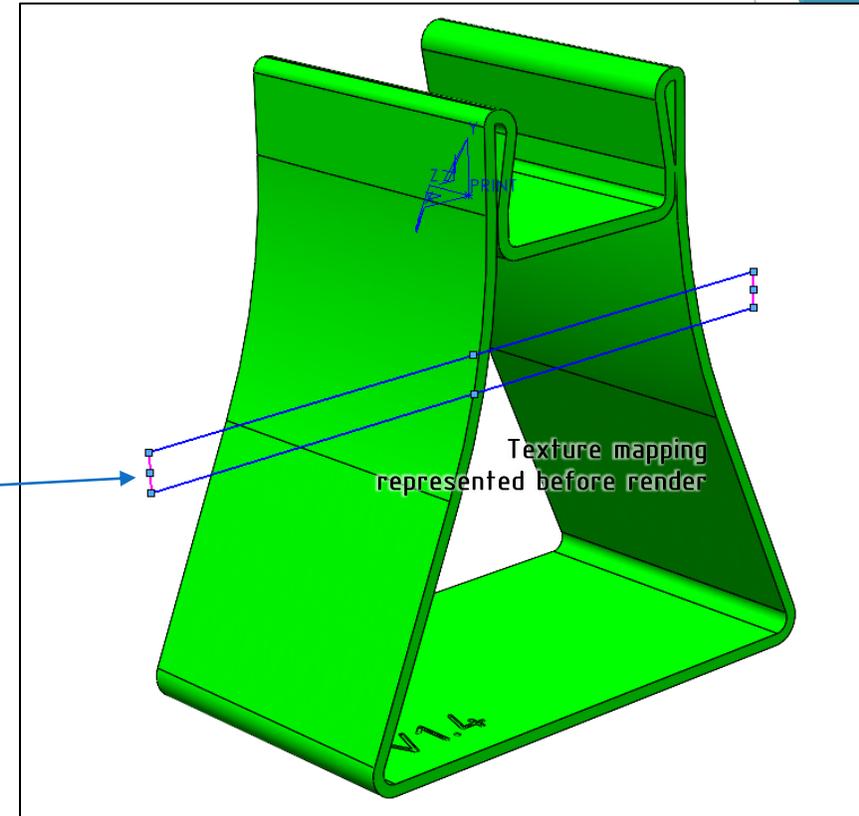


# Handling Texture - SOLIDWORKS



## Settings:

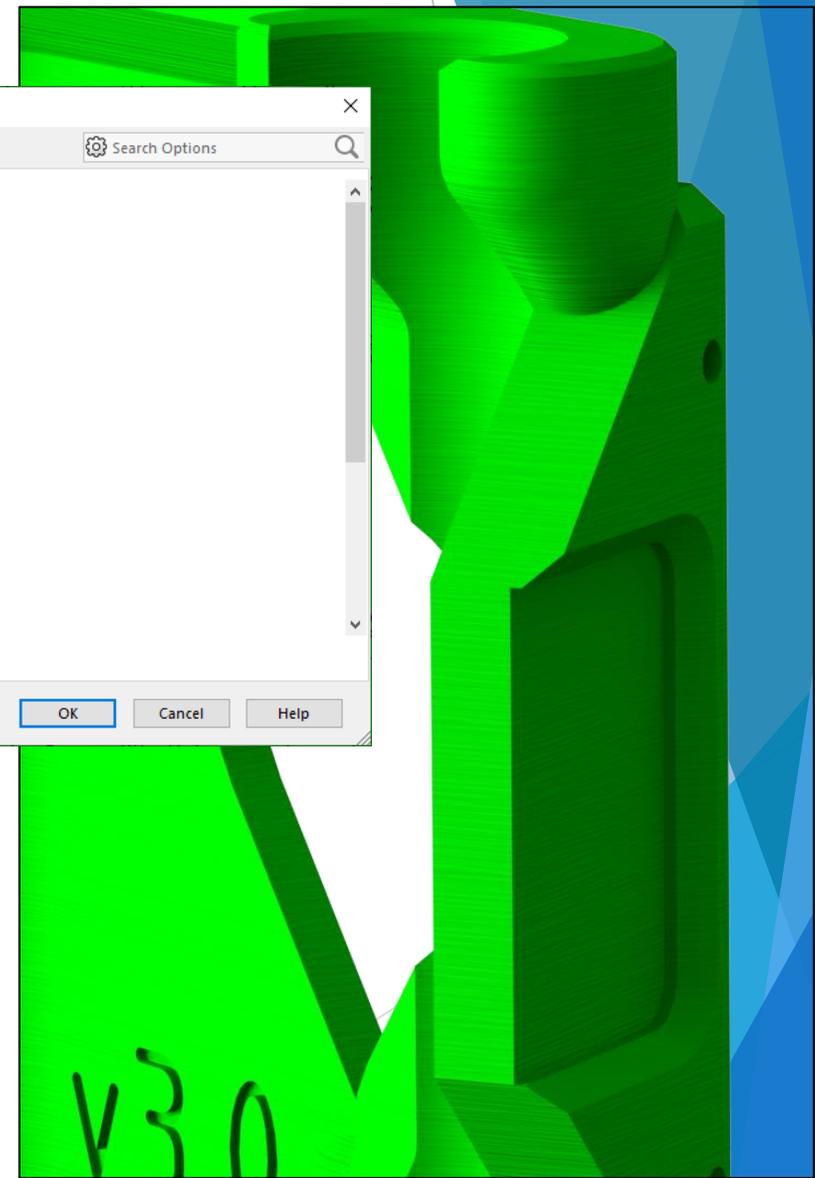
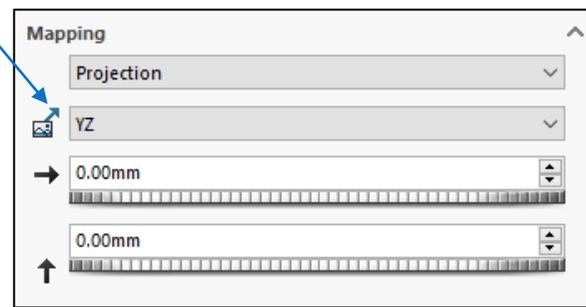
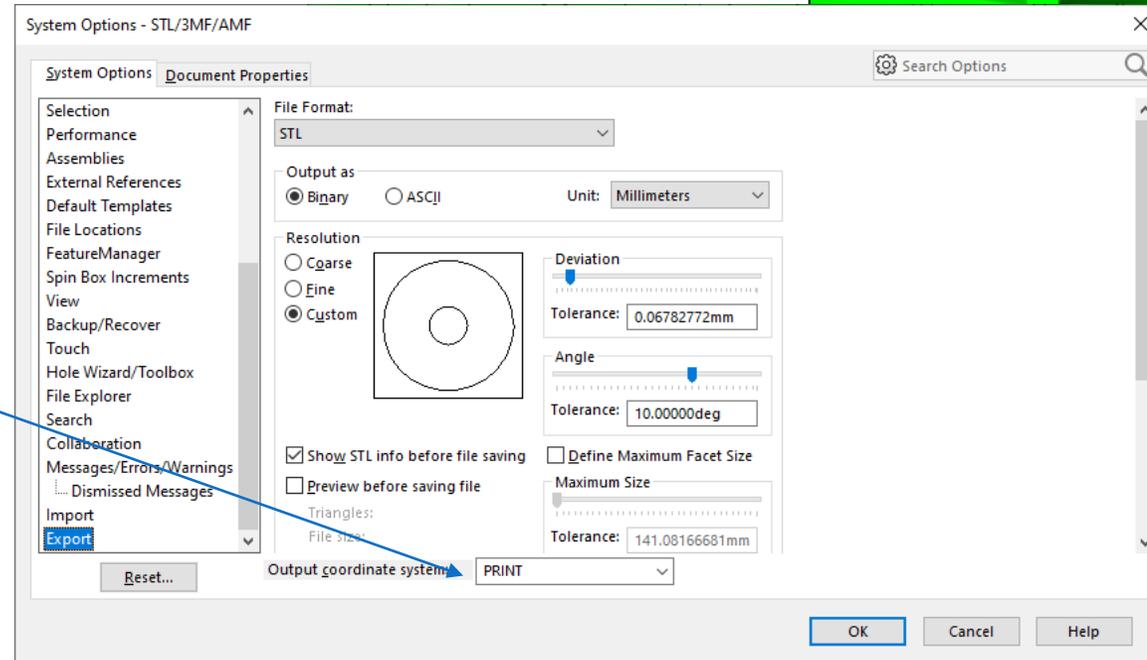
- When you go to the Advanced button ► Mapping tab,
- You will see the bounding box described by your mapping settings.
- The blue box describes the plane along which the texture mapping is stretched.
- This box shown corresponds to 6x120mm texture mapping.
- The grain direction is automatically selected.



# Handling Texture - SOLIDWORKS



- Mapping Settings:
- Before applying mapping, select **OPTIONS** ► **SYSTEM OPTIONS** ► **Export** to set coordinate system.
  - Set export coordinate system to your **PRINT** coordinates.
  - Achieve the right direction by adjusting mapping plane
    - Select projection
    - Select desired plane

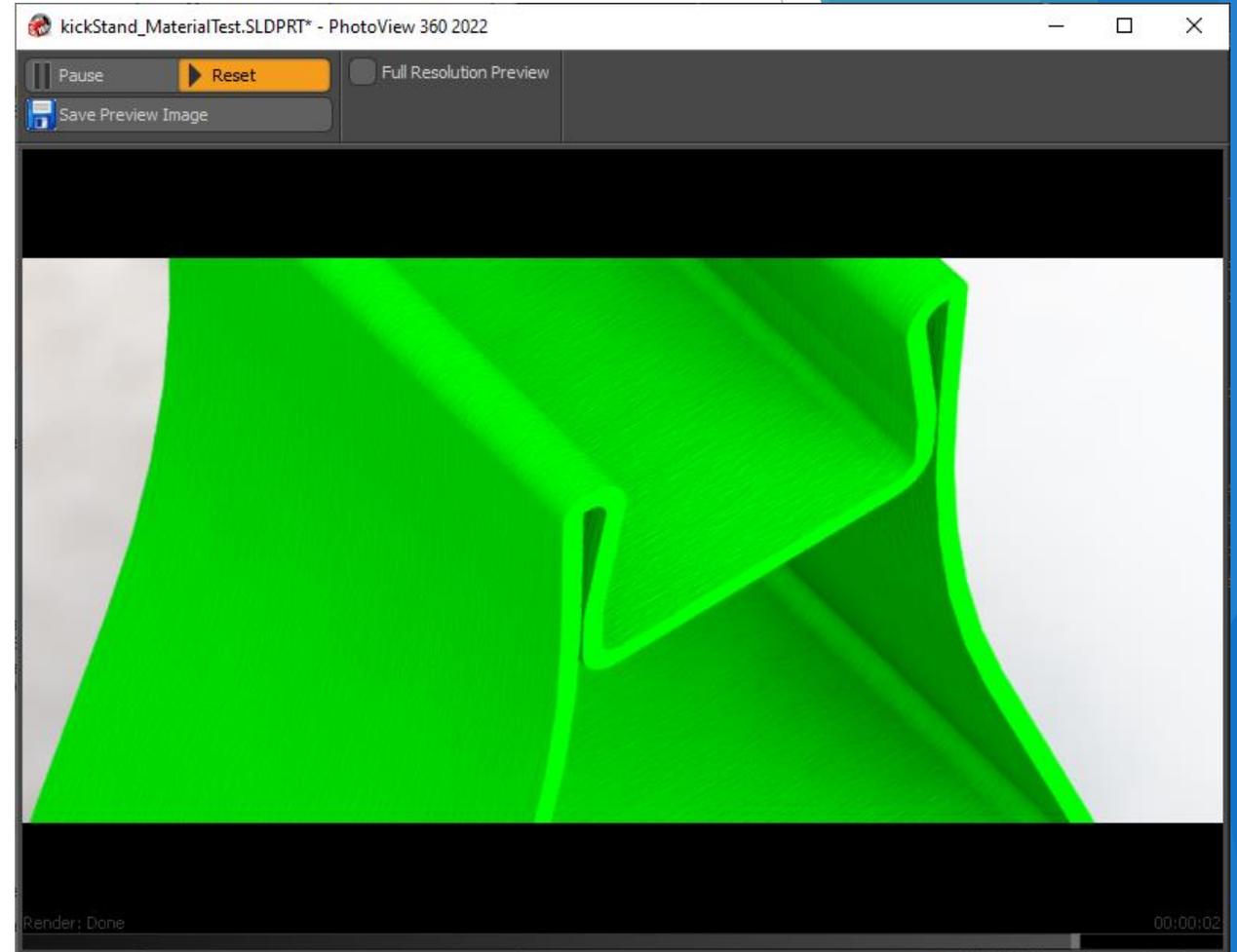
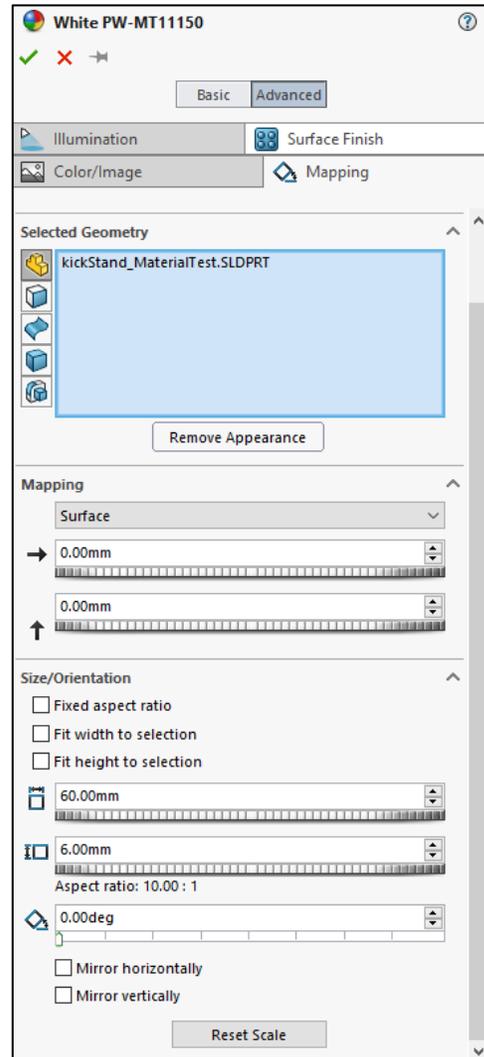


# Handling Texture - SOLIDWORKS



## Mapping Settings

- Adjust the default size of the PW-MT plastic
- Uncheck "fixed aspect ratio"
- Set width to 120mm
- Set height to 6mm



Achieve this texture using the texture menu.

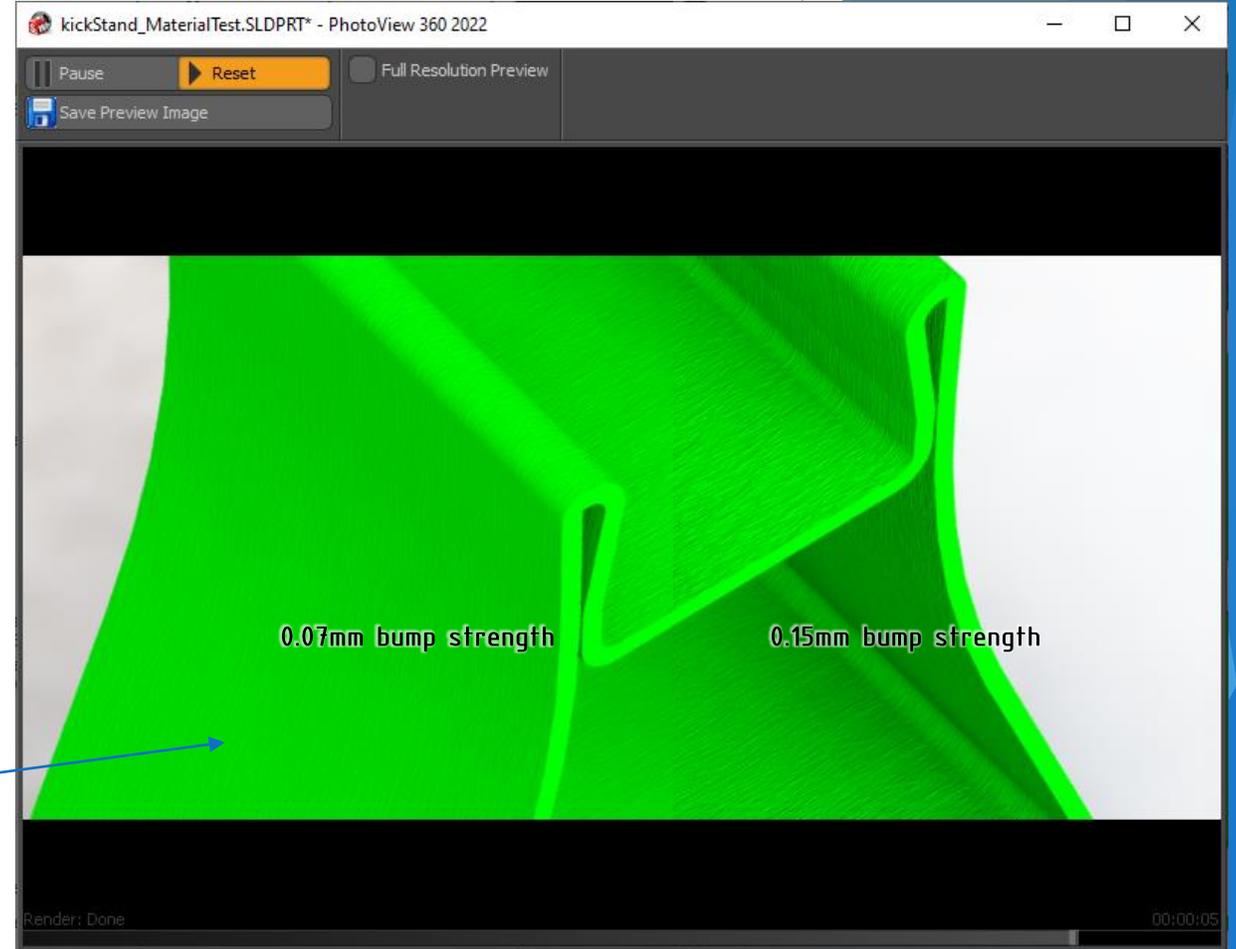
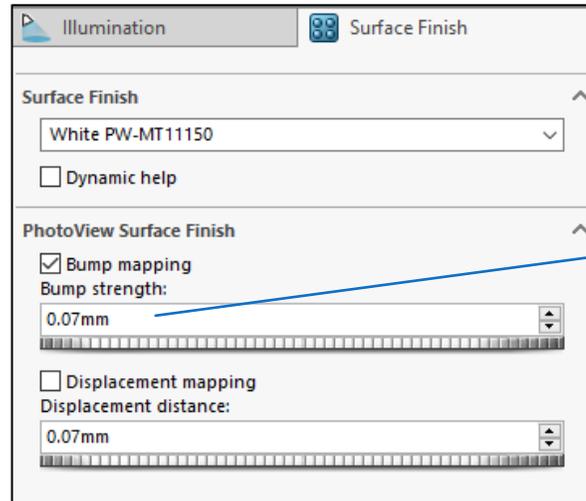
# Handling Texture – SOLIDWORKS



Quick reference after discovering a simple way to handle SOLIDWORKS textures:

## Mapping Settings ► Surface Finish:

- Leave bumps at 0.07mm height
- This does not affect the model or the STL exported. It only affects the renderings in PhotoView
- We want the height of bumps essentially to match the height of deviations resulting in prints.



Achieve this texture using the texture menu.

# Render Key Points



## Settings:

- Omit background from your render so the image works nicely on slides
- Omit floor reflections and floor shadows
- Export PNG for good quality and small file size

