

THE ULTIMATE TRIM

- texturing techniques of Sunset Overdrive

Morten Olsen

Principal Environment Artist

Insomniac Games

Working in environment art for games since 2004, previously at Deadline Games, Copenhagen and Bioware, Montreal. With Insomniac Games since 2011.

Titles

Total Overdose

Chili Con Carnage

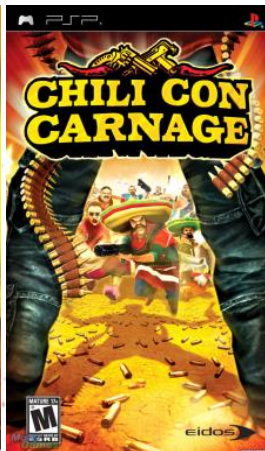
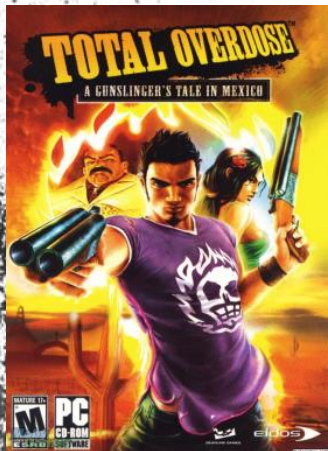
Watchmen

Mass Effect 2

Mass Effect 3

Fuse

Sunset Overdrive











SUNSET CITY

environment artists 8-12
rough size 1400 x 2400 m



ULTIMATE TRIM

A technique that speeds up the texturing process, creates a high poly look with fake beveled edges and makes materials more reusable.



Consisting of two main parts:

- a standardized trim layout
- 45 degree normal map bevels along all edges

Almost anything can be broken down into trims and mapped with The Ultimate Trim





LAYOUT

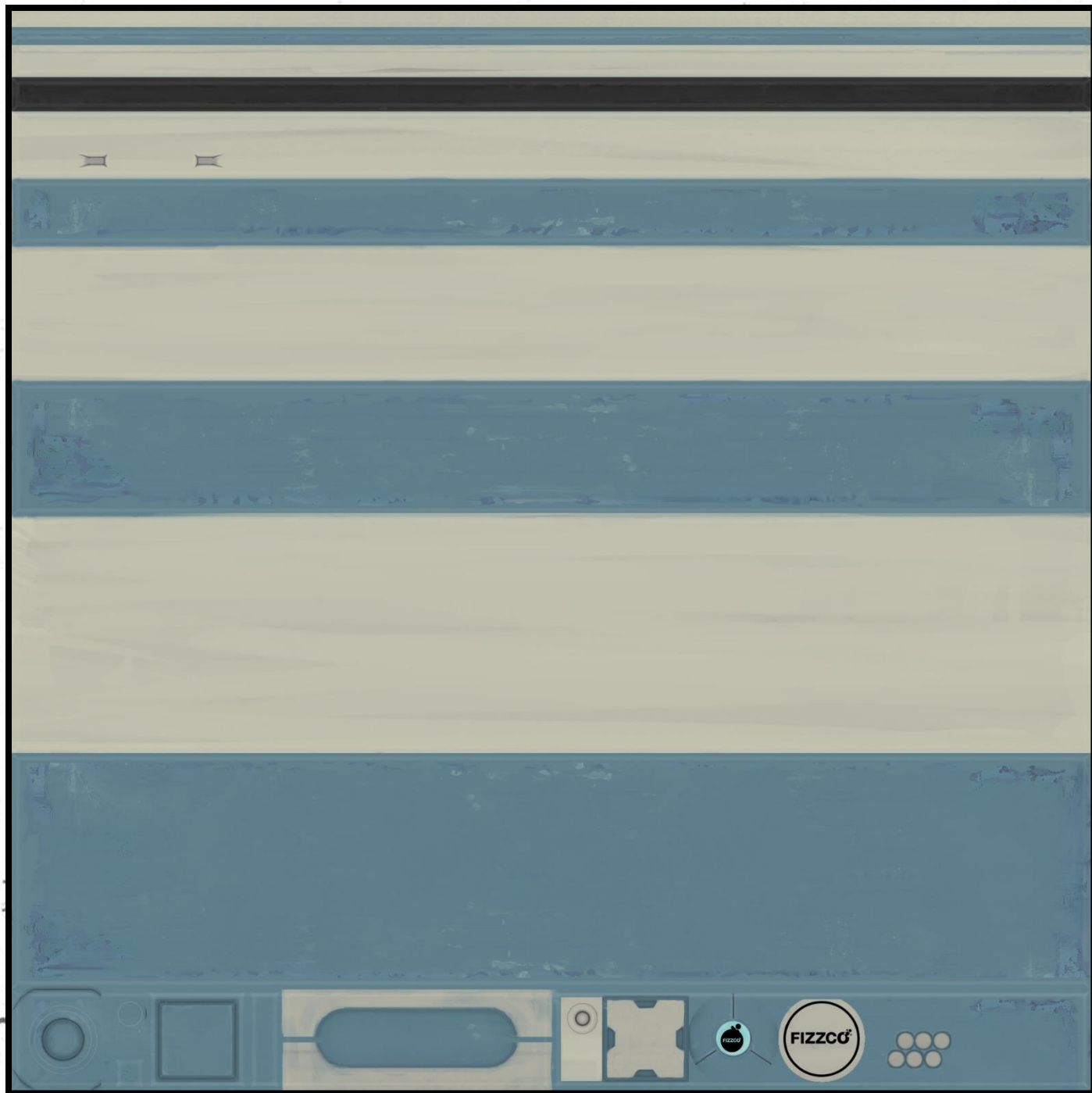




LAYOUT



LAYOUT



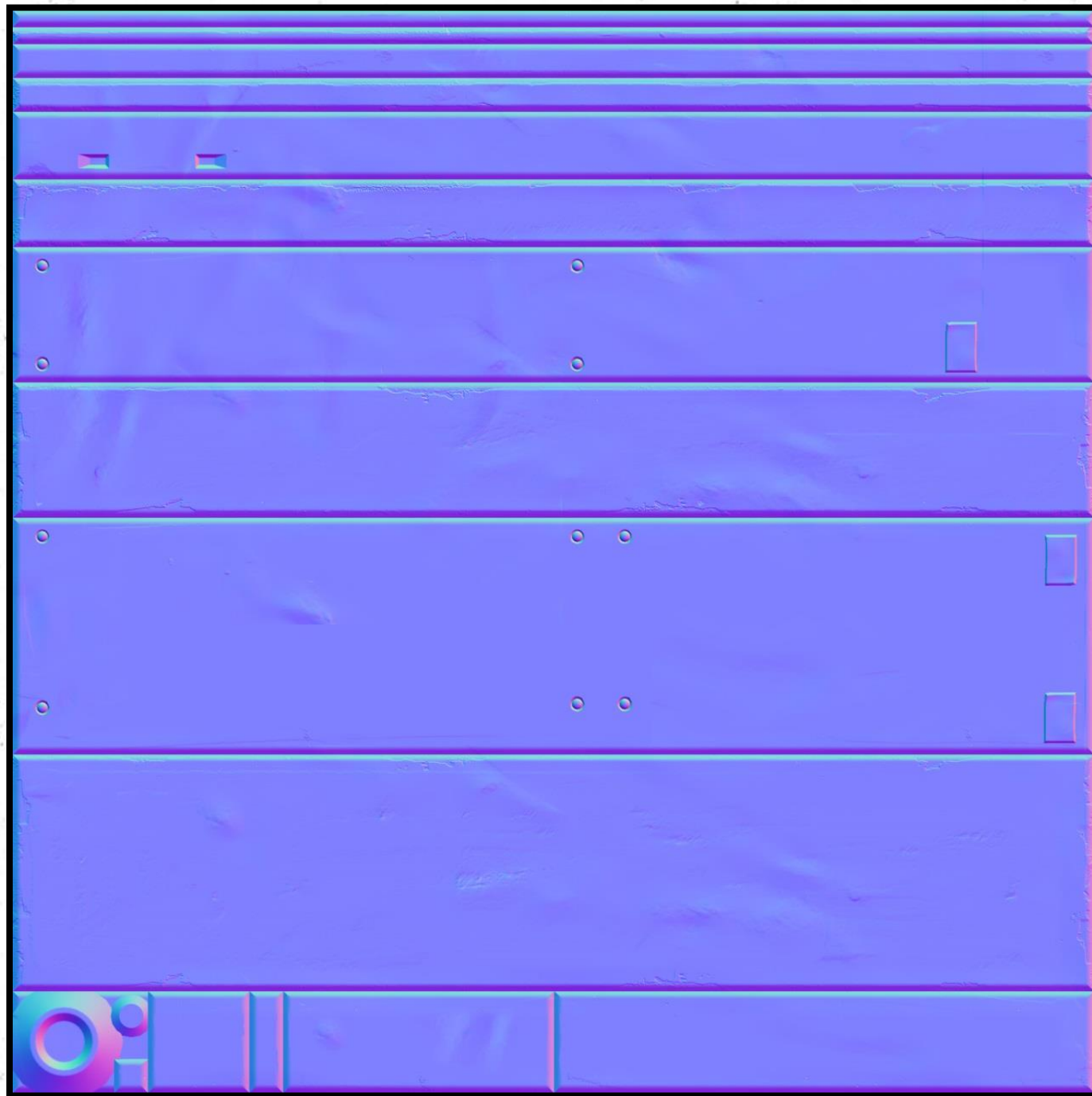
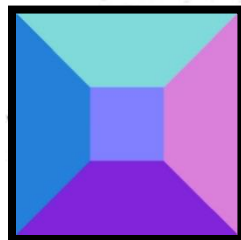
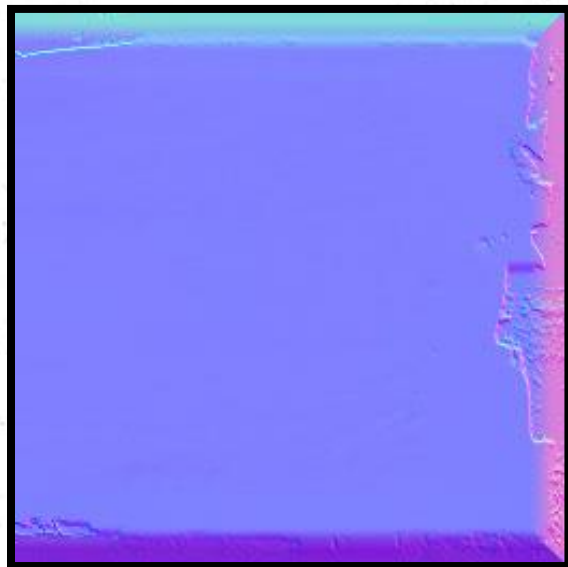
LAYOUT



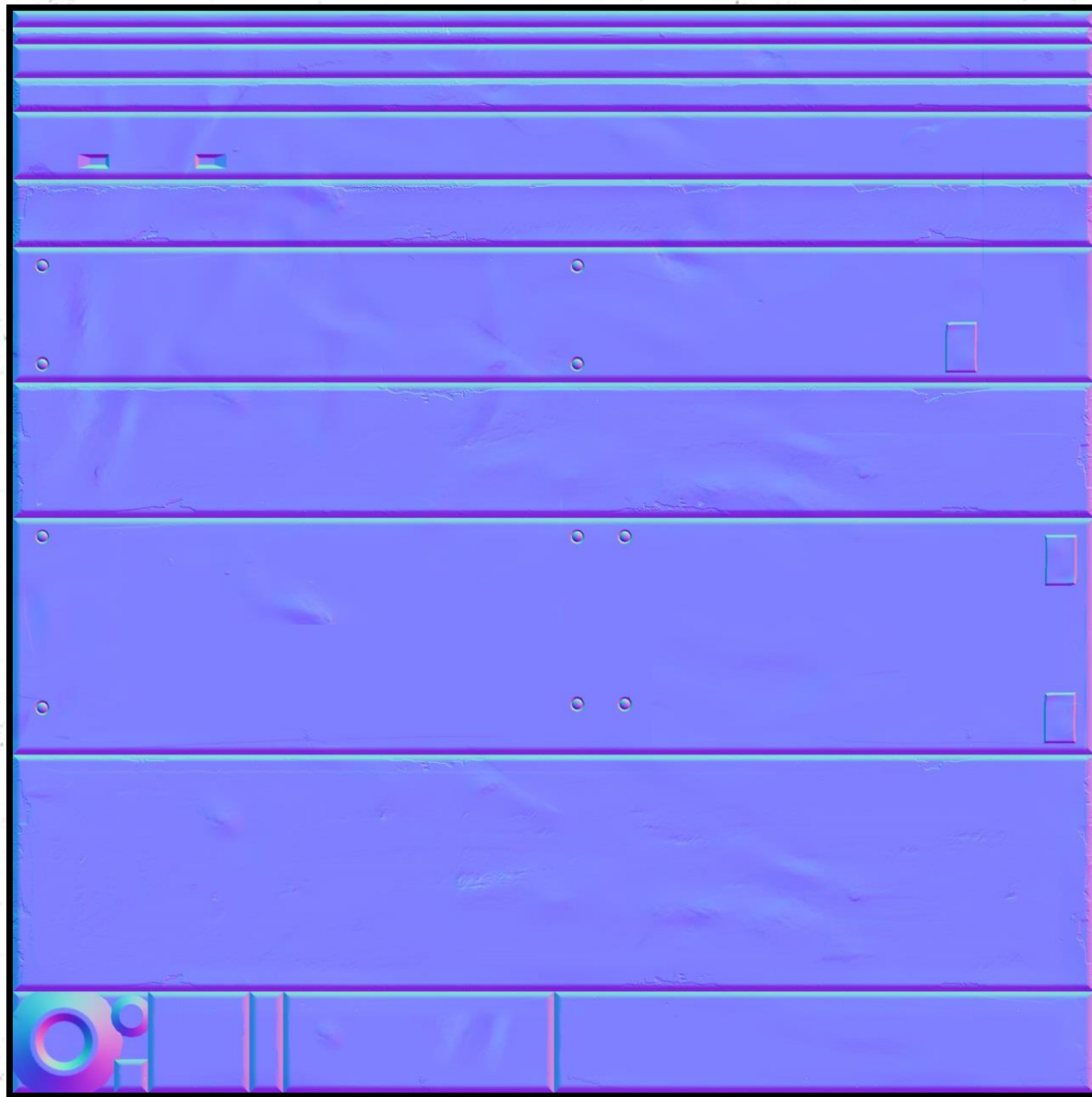
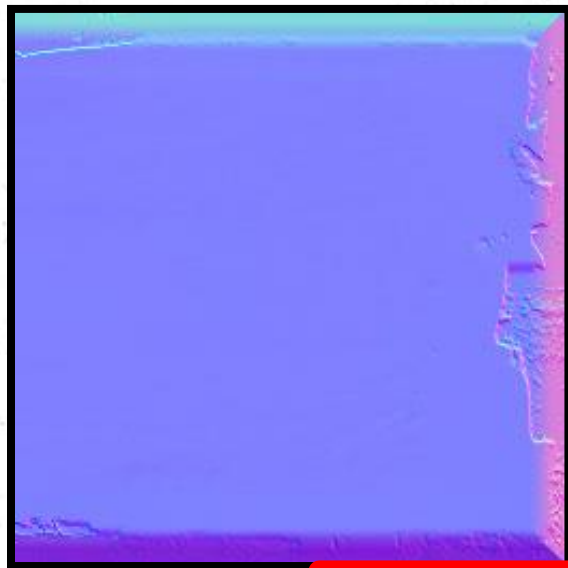
LAYOUT



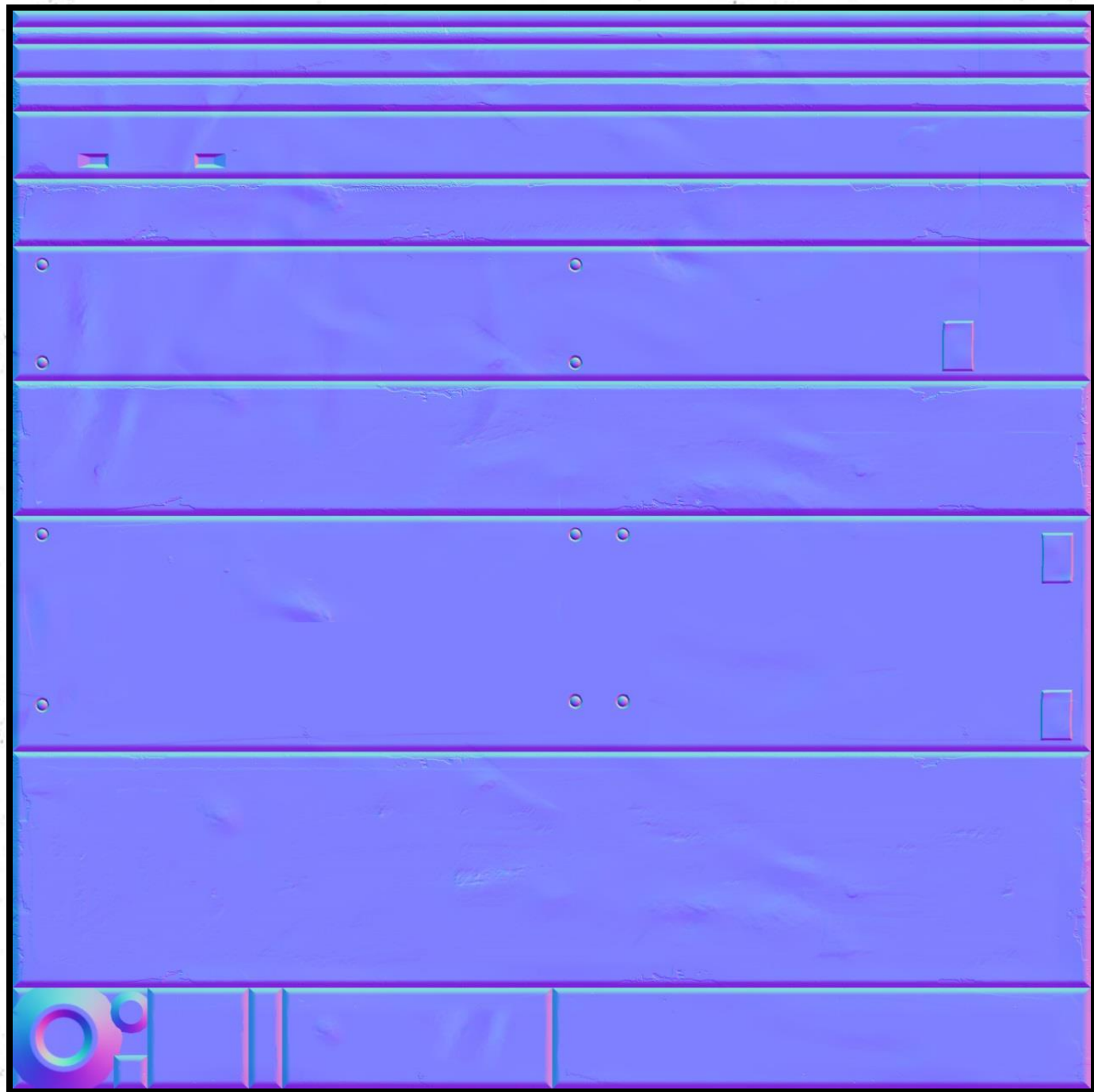
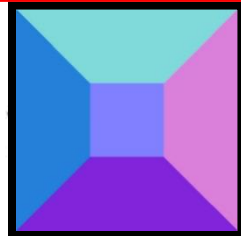
NORMAL MAP BEVELS



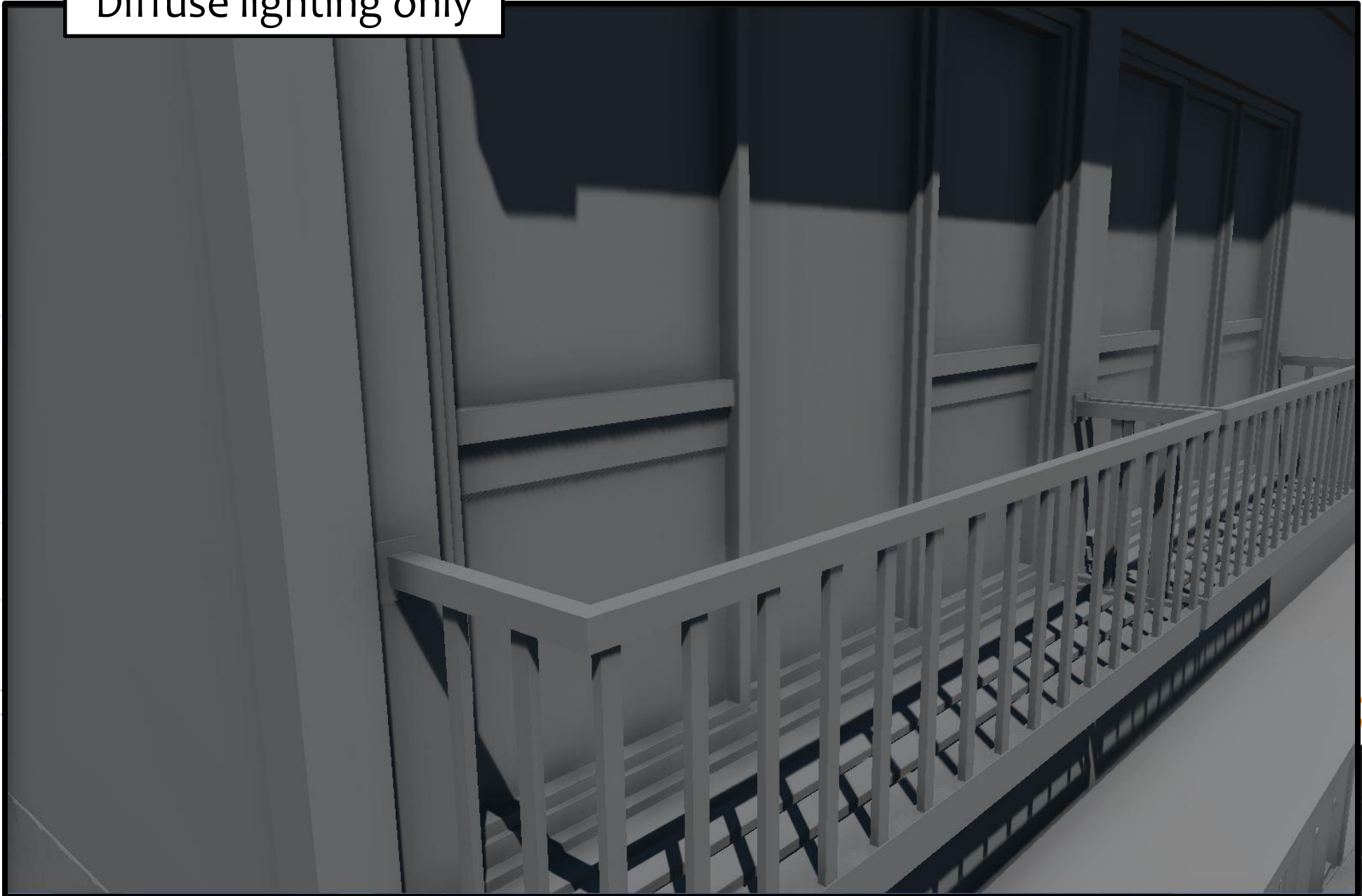
NORMAL MAP BEVELS



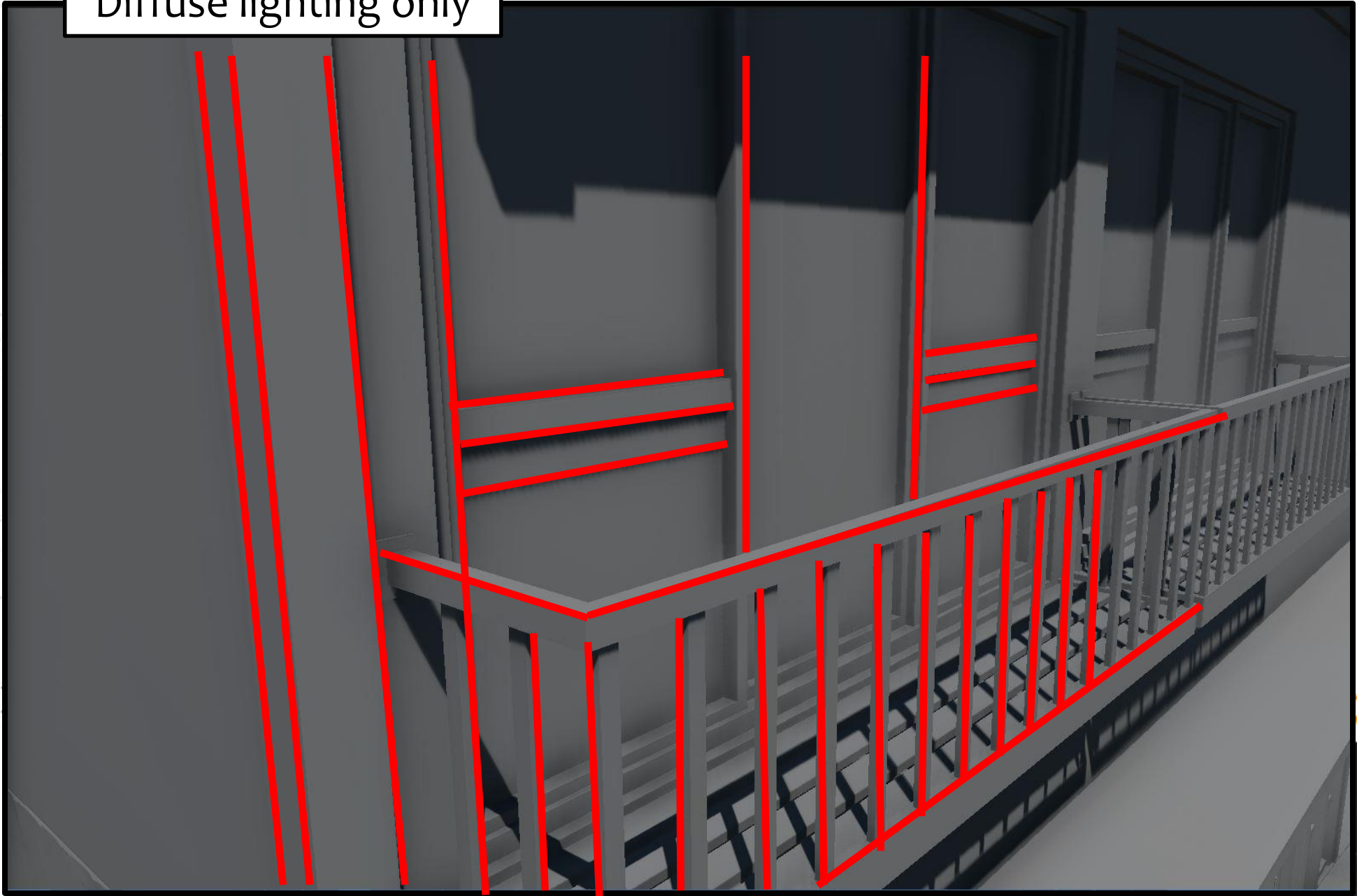
NORMAL MAP BEVELS



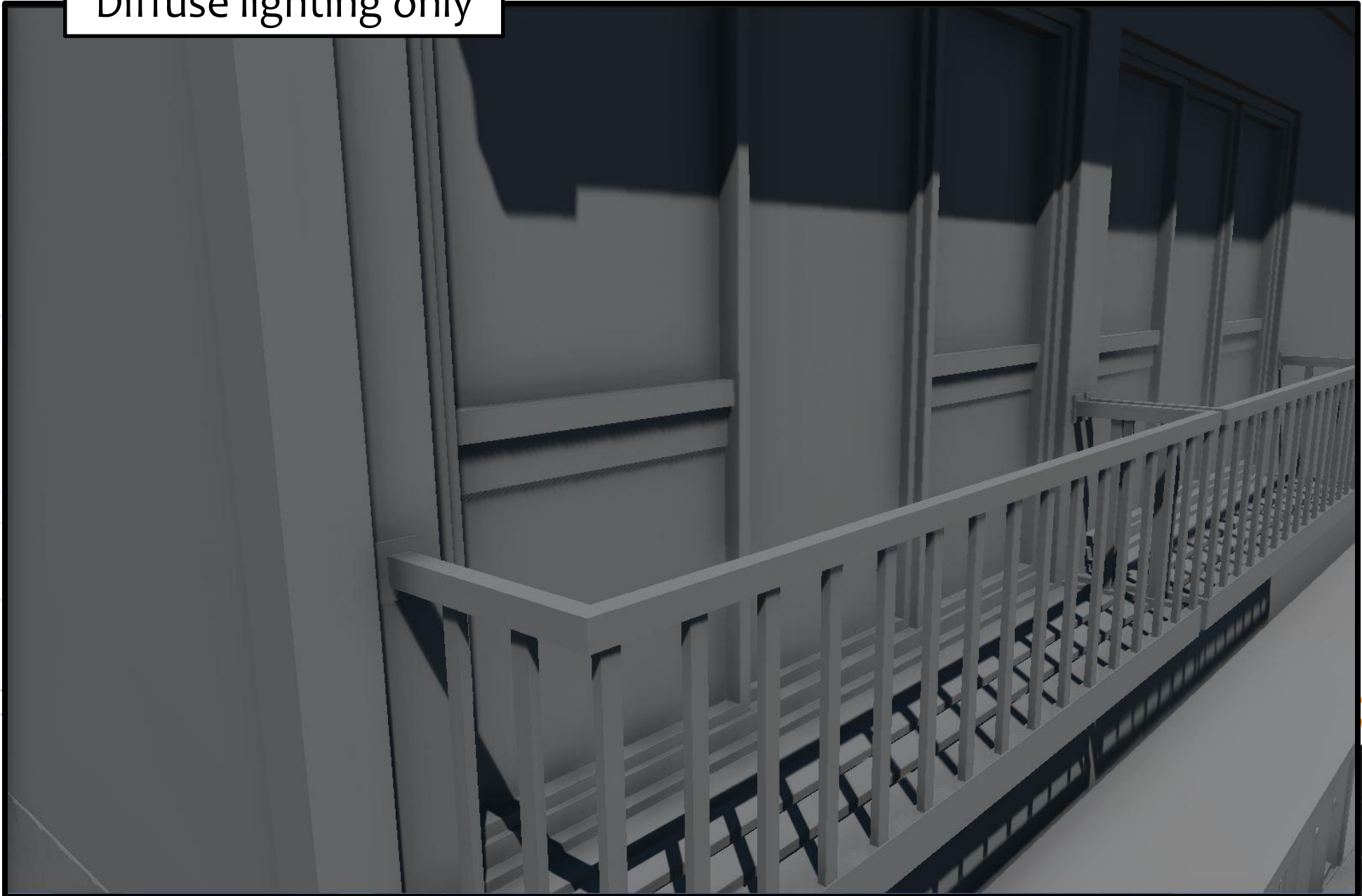
Diffuse lighting only



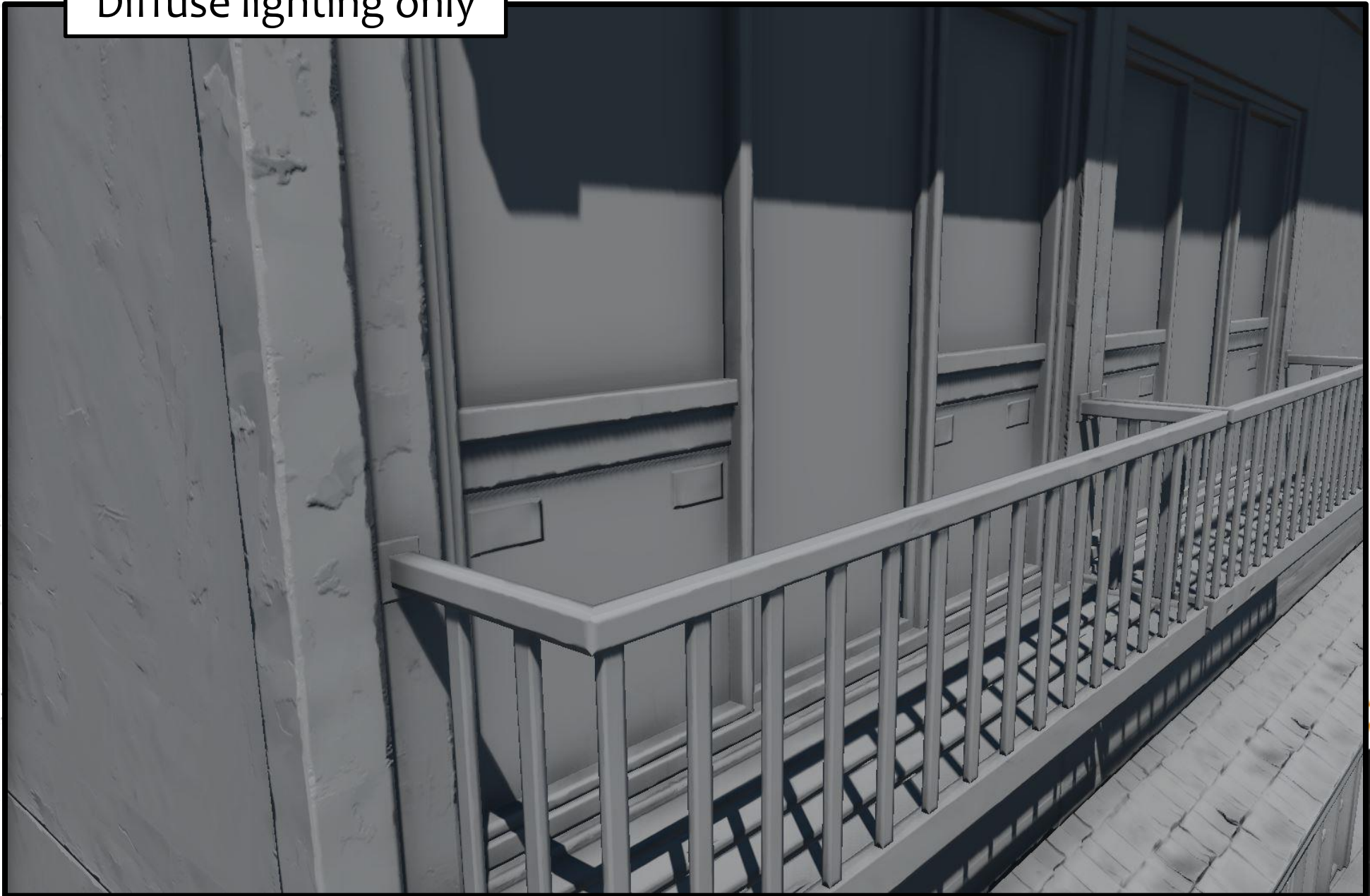
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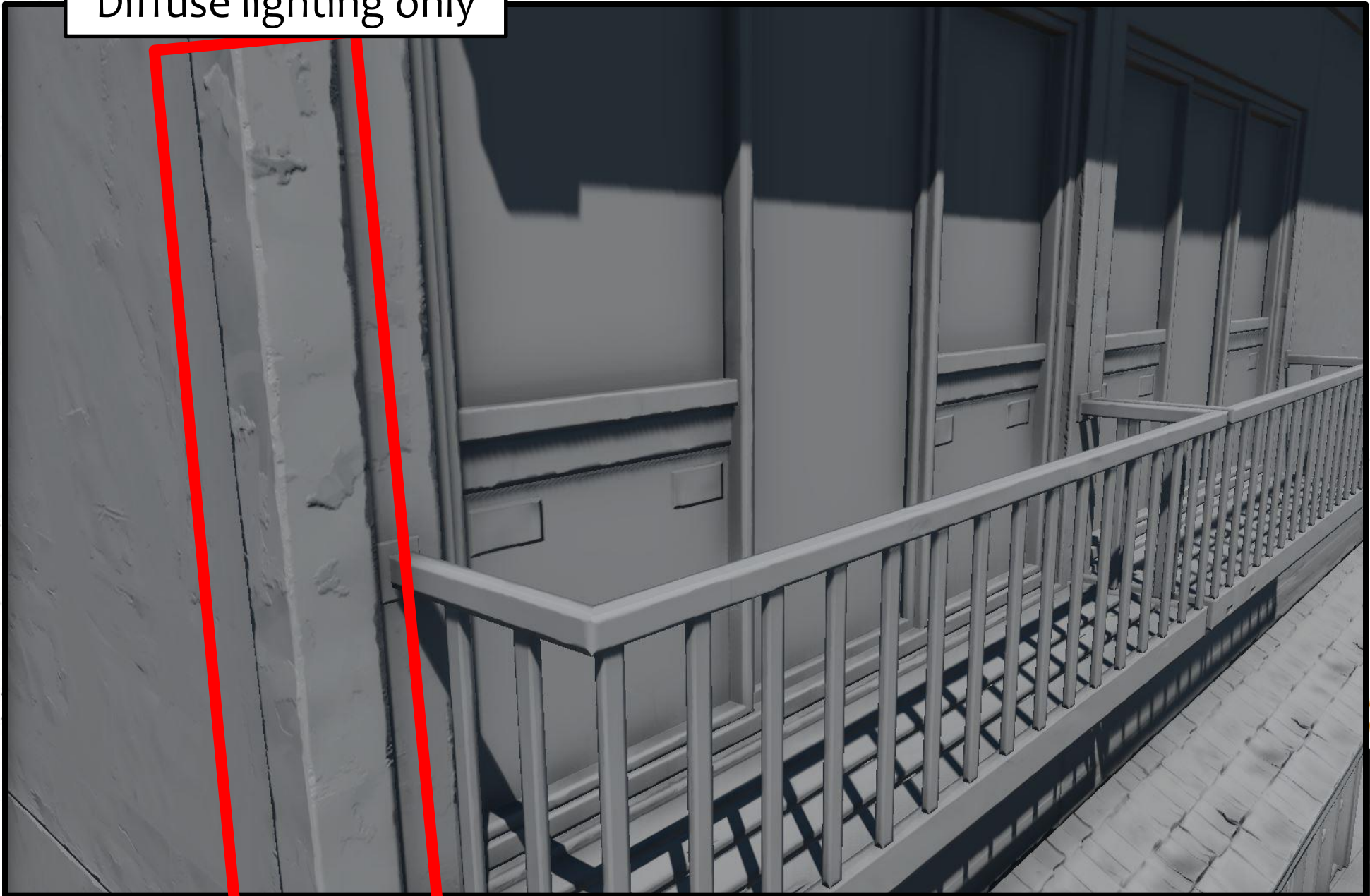
Diffuse lighting only



Diffuse lighting only



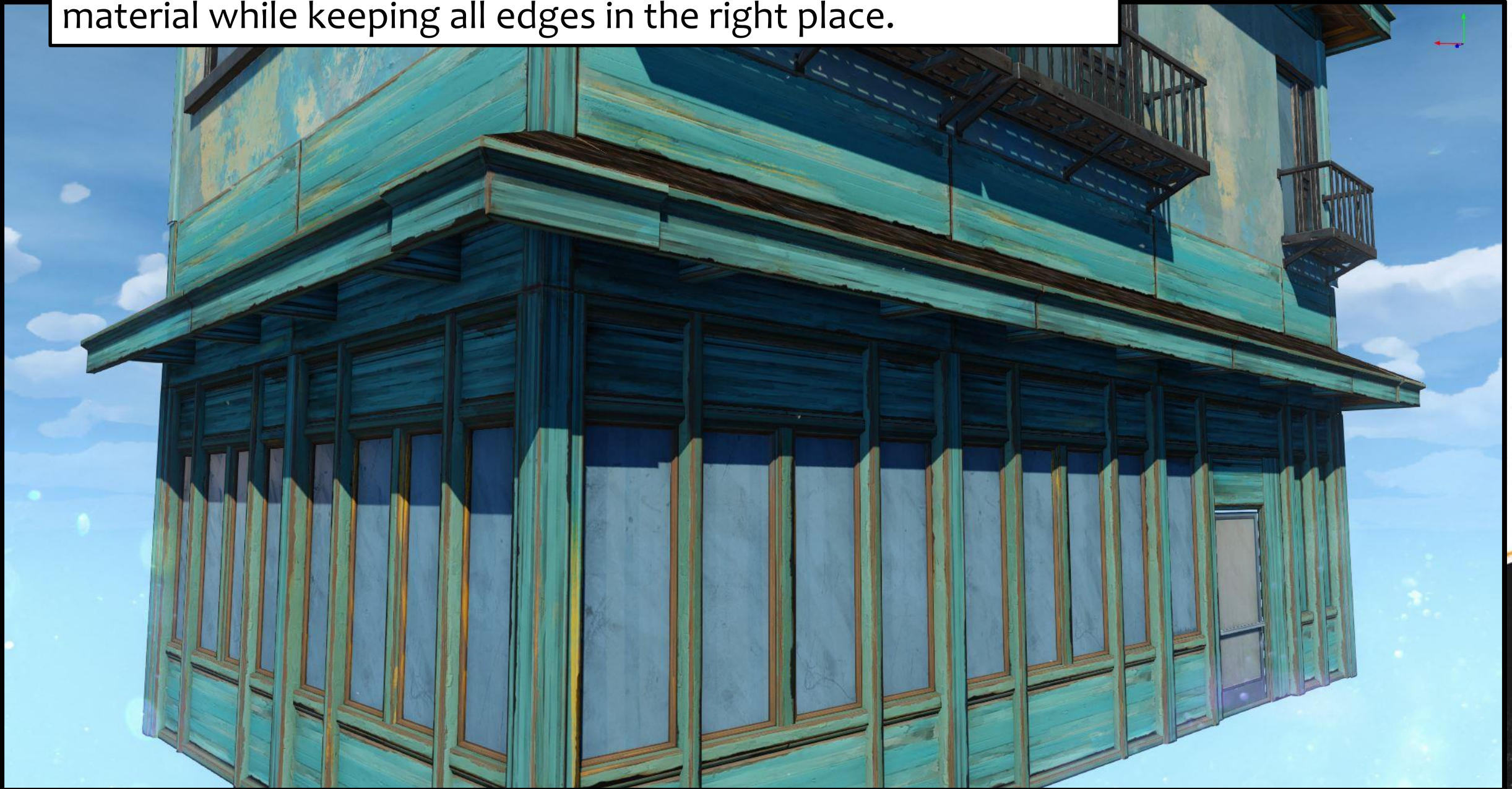
Diffuse lighting only



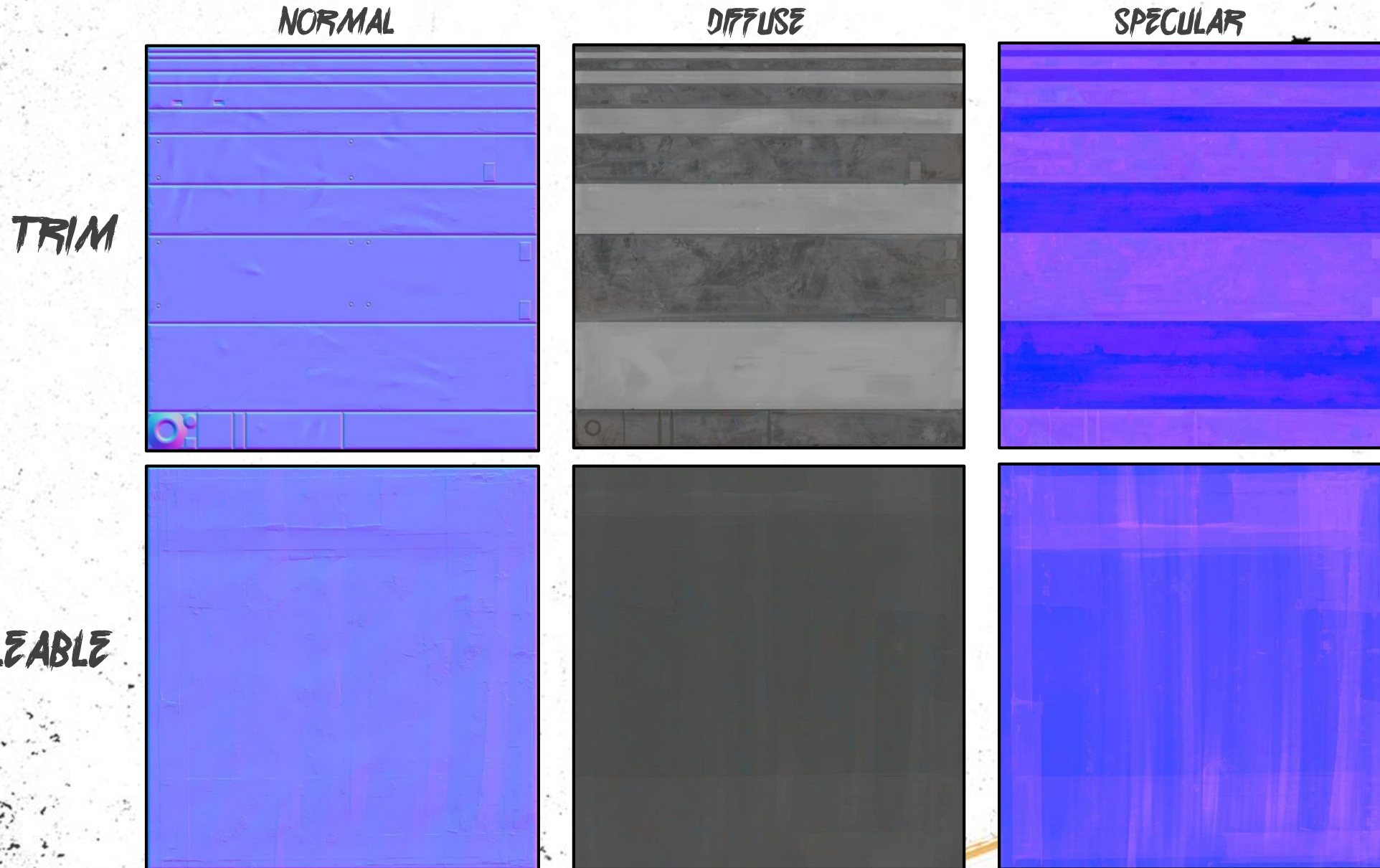
With a completely standardized UV layout, we can swap any material while keeping all edges in the right place.



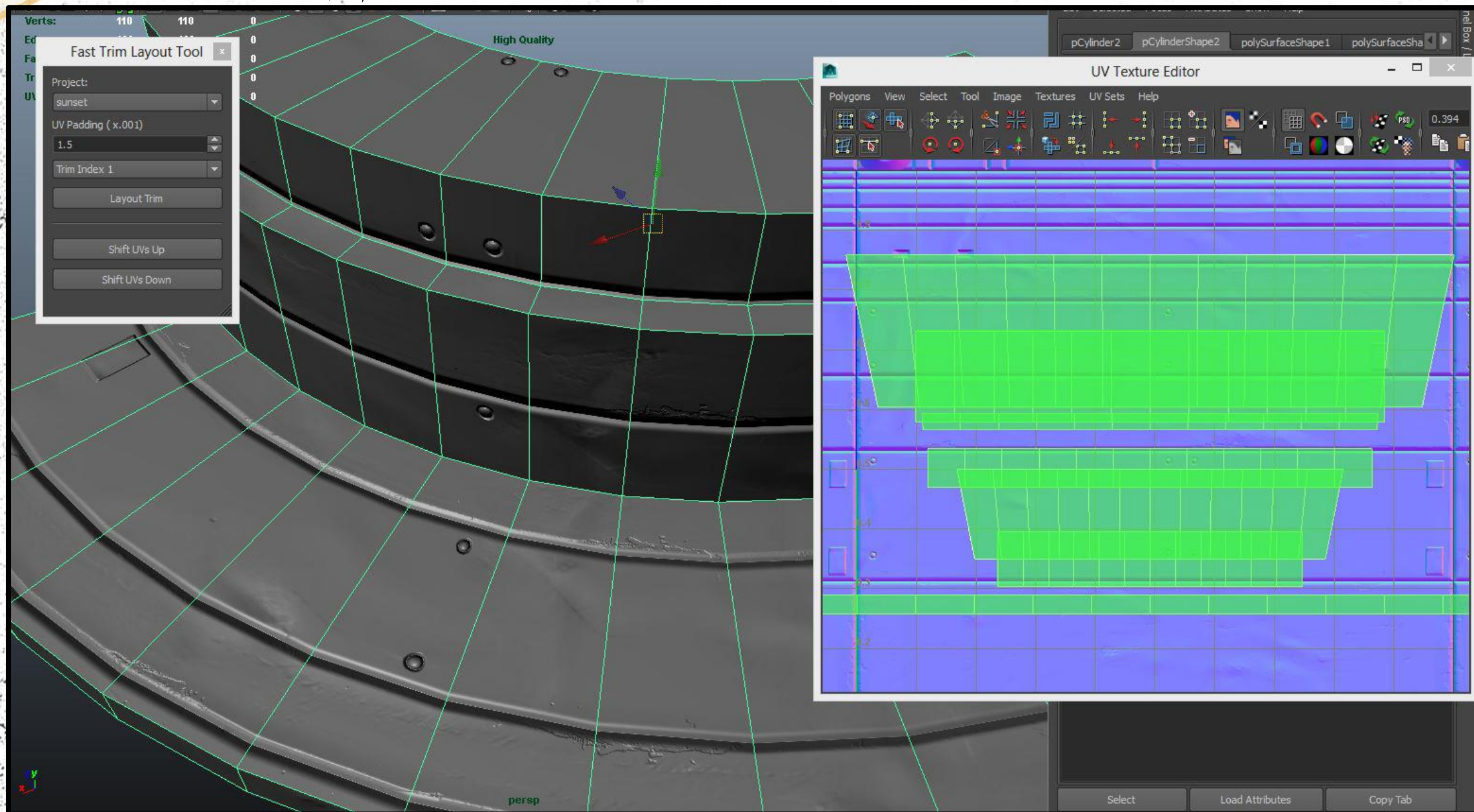
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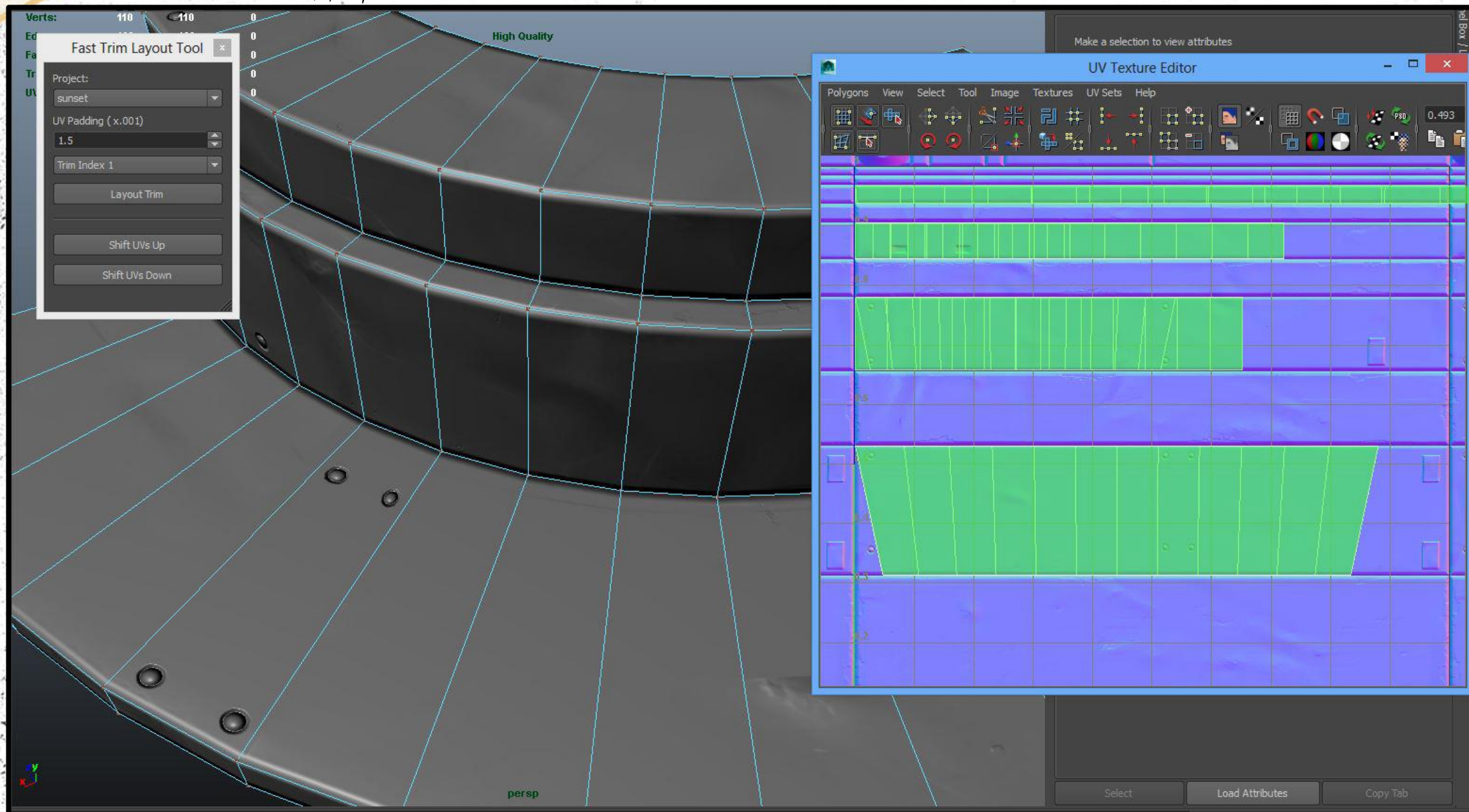
For each material type we have a trim and a plain tileable version. With those two combined we can cover any surface in the game.



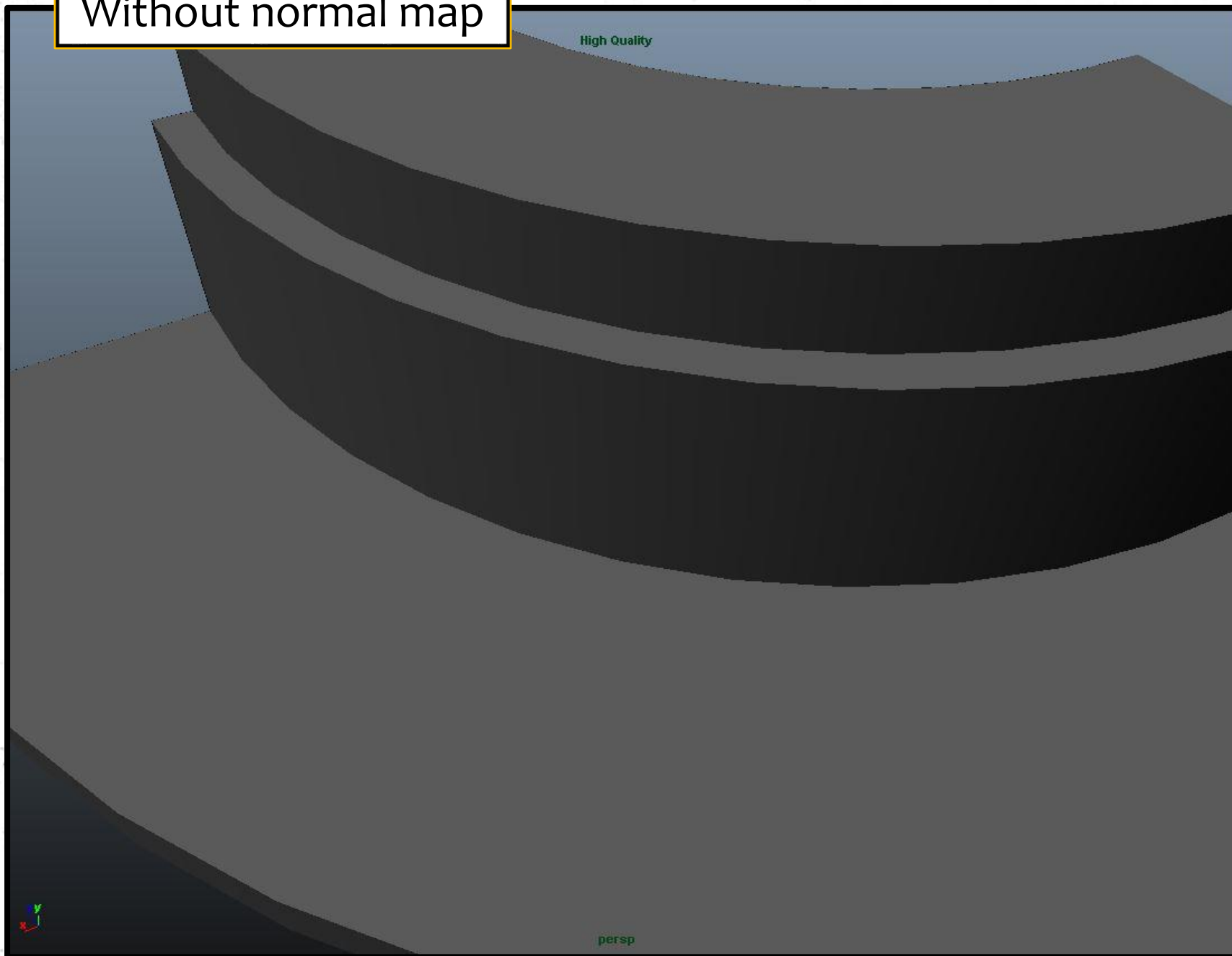
WORKFLOW



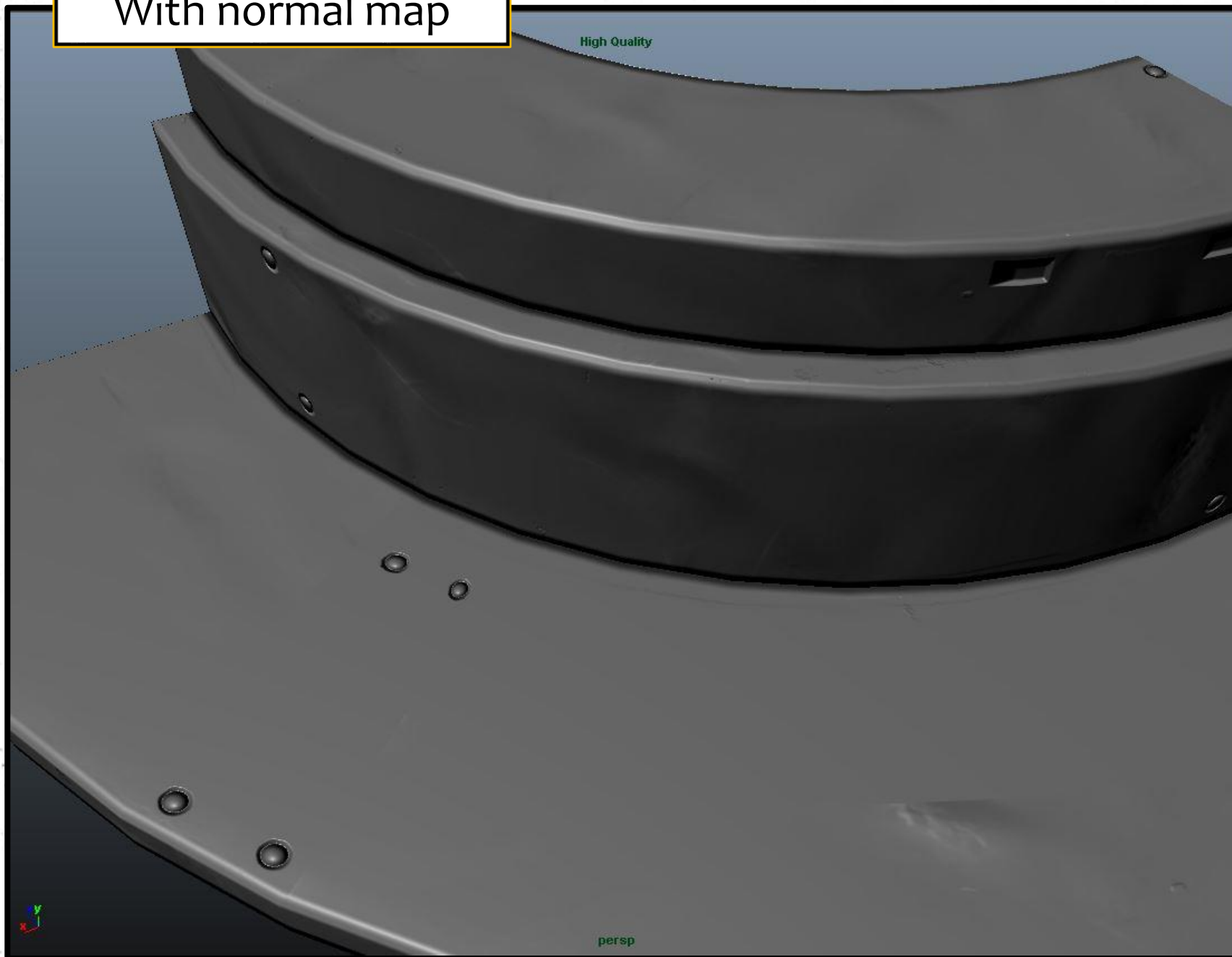
WORKFLOW

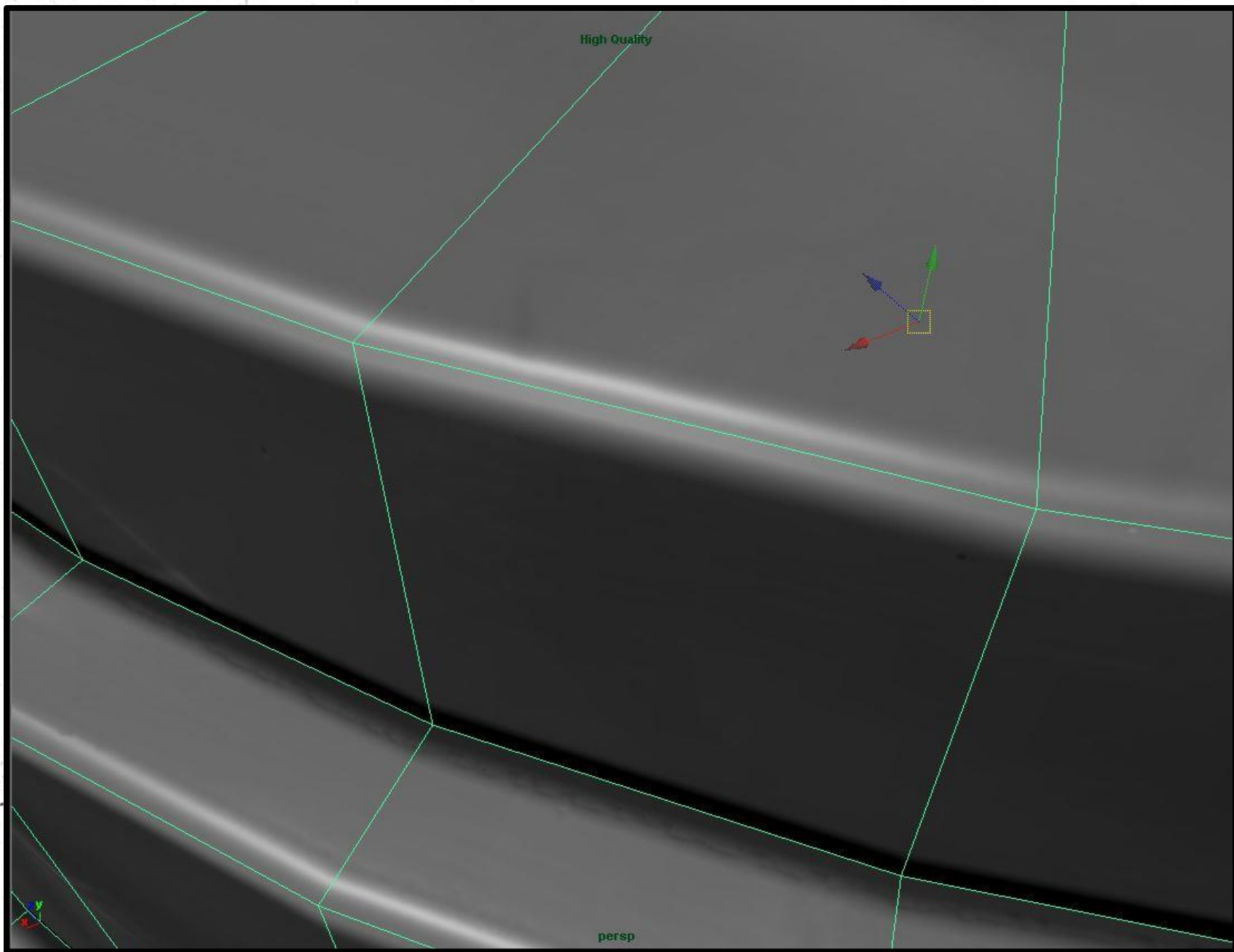


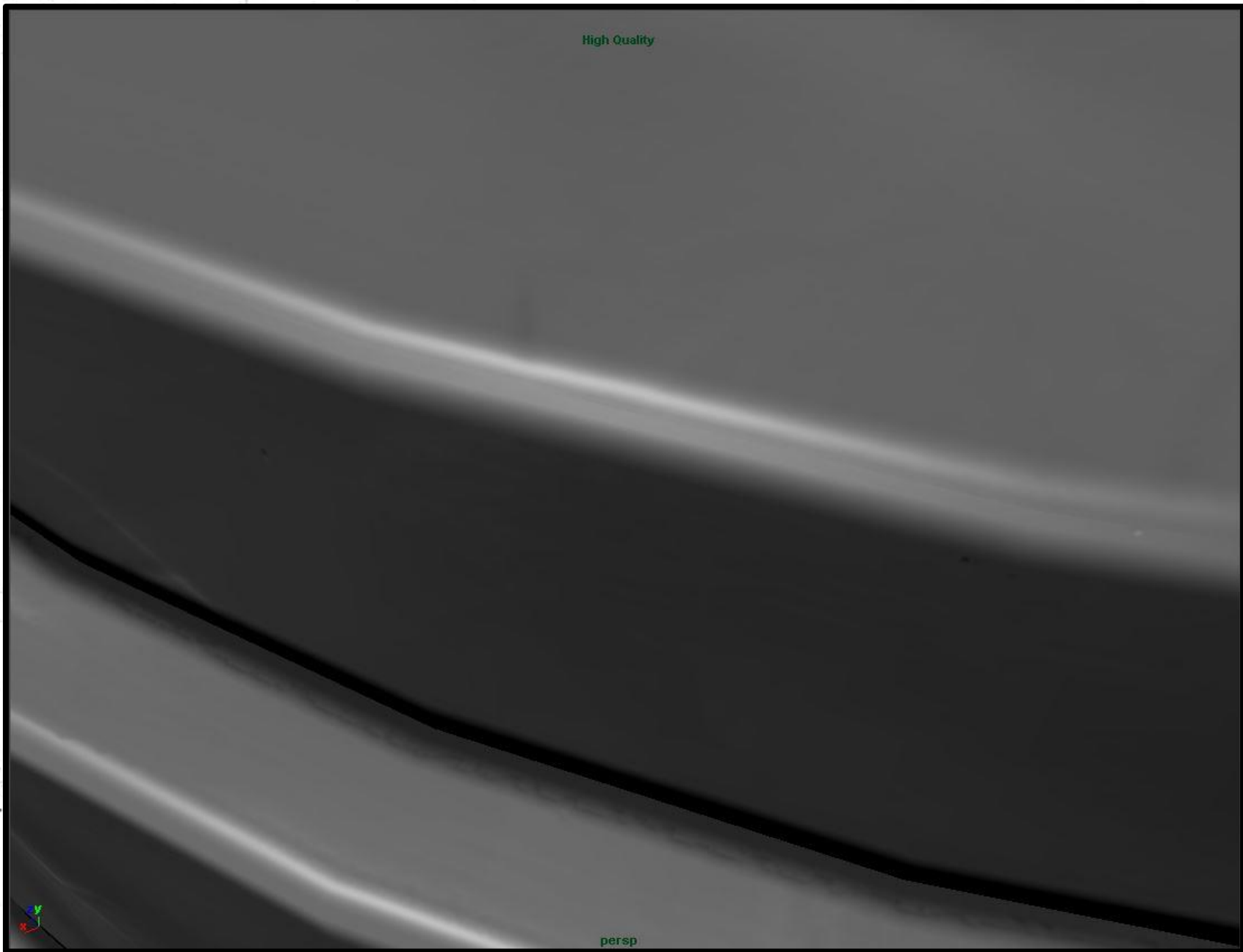
Without normal map



With normal map

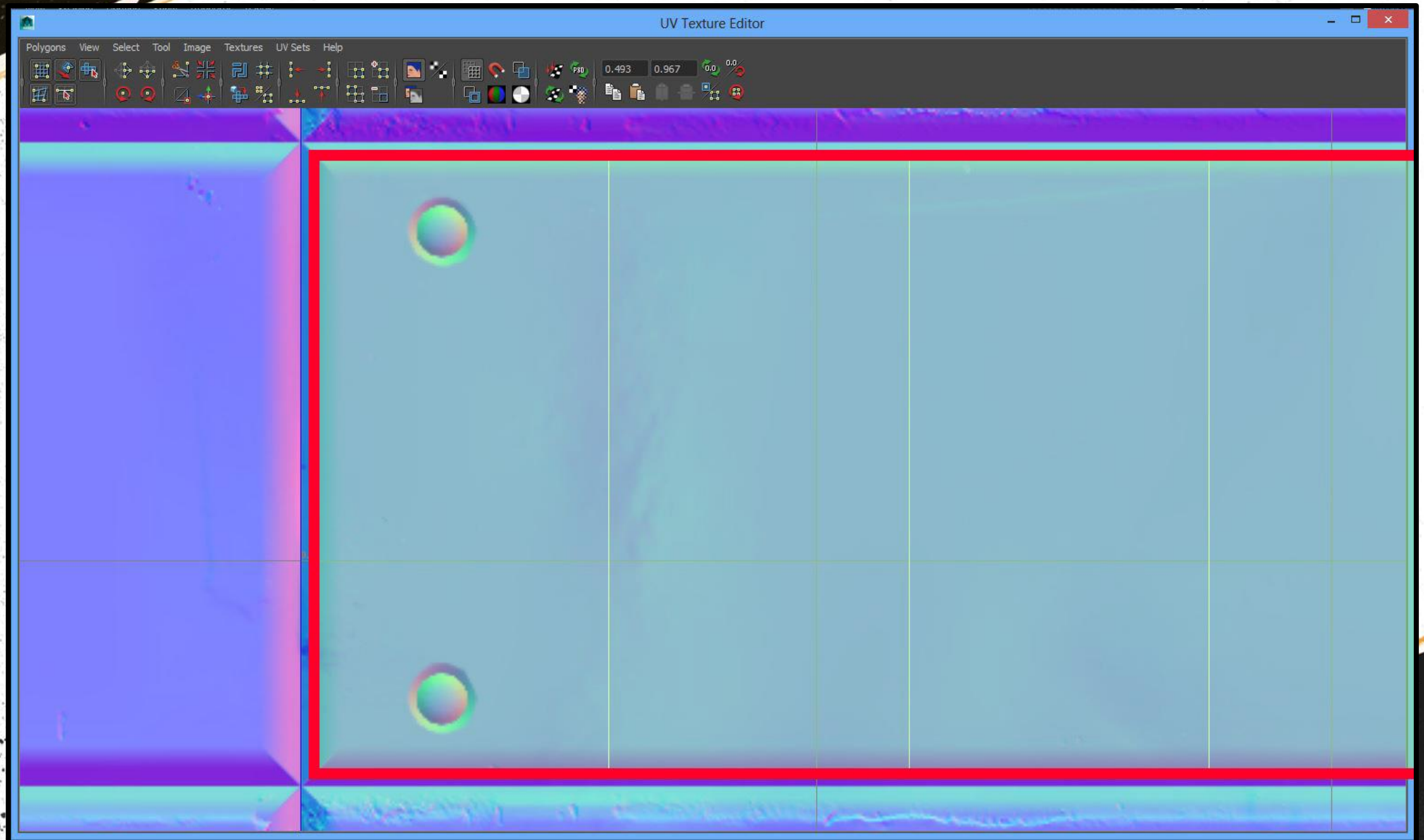


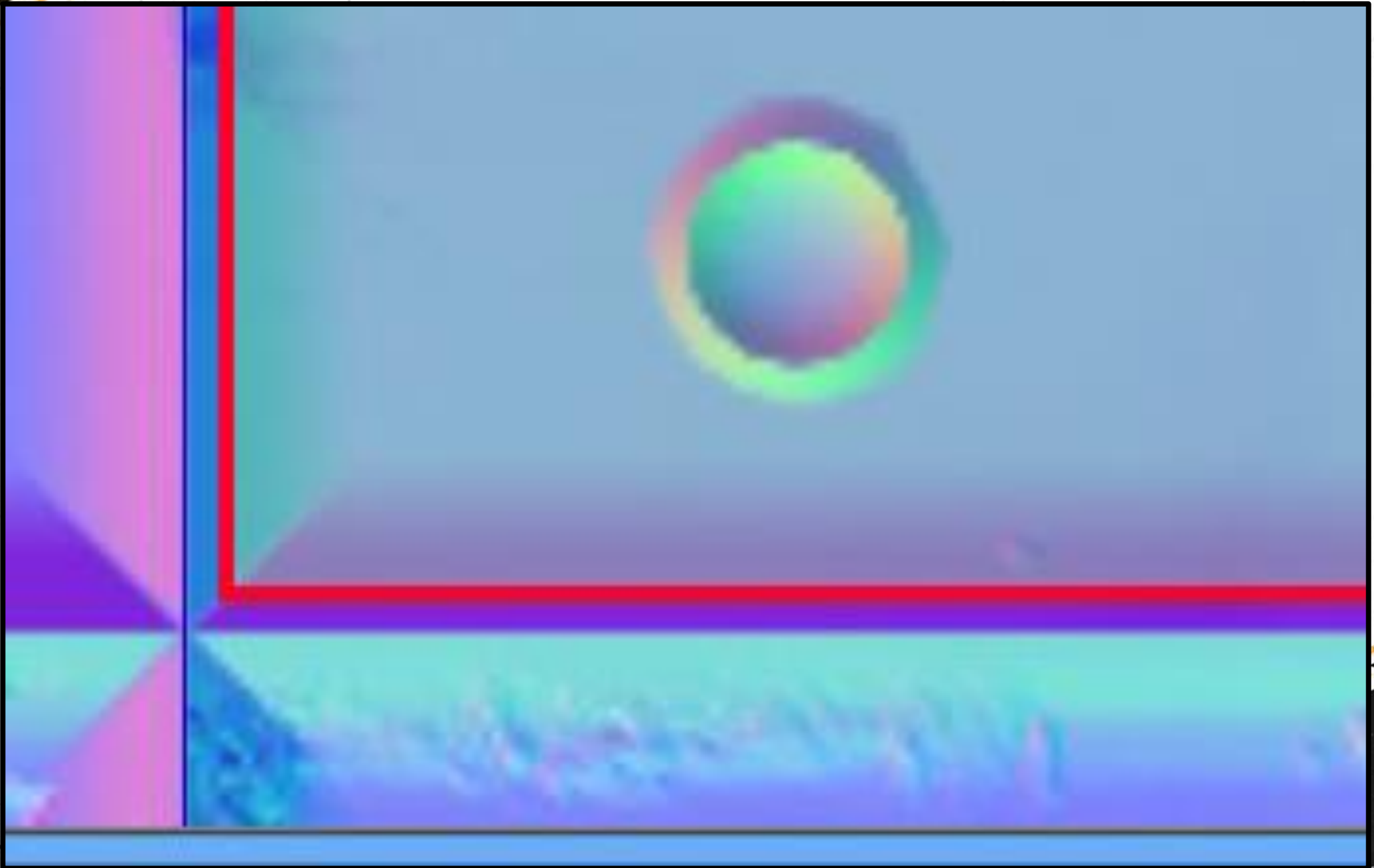


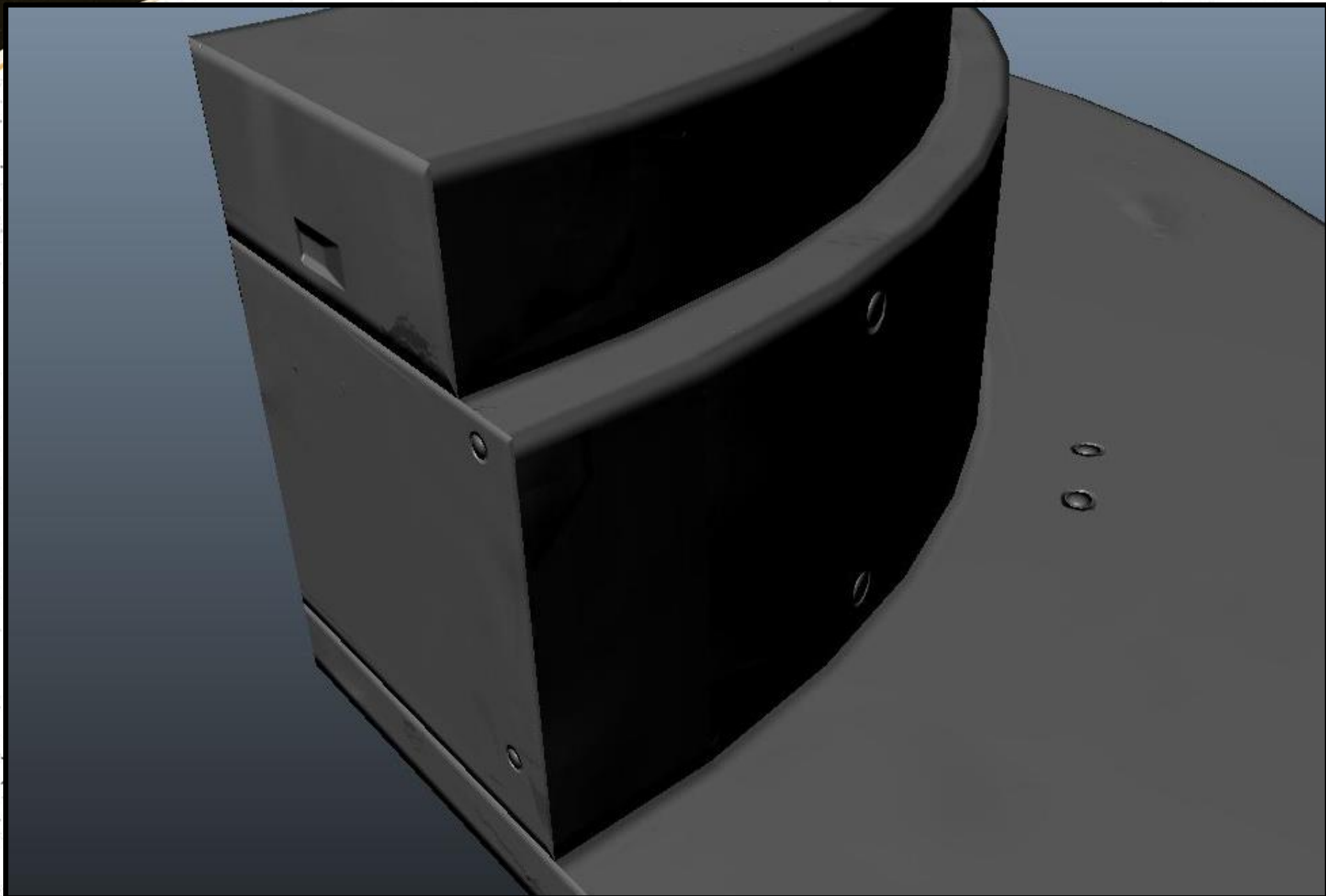


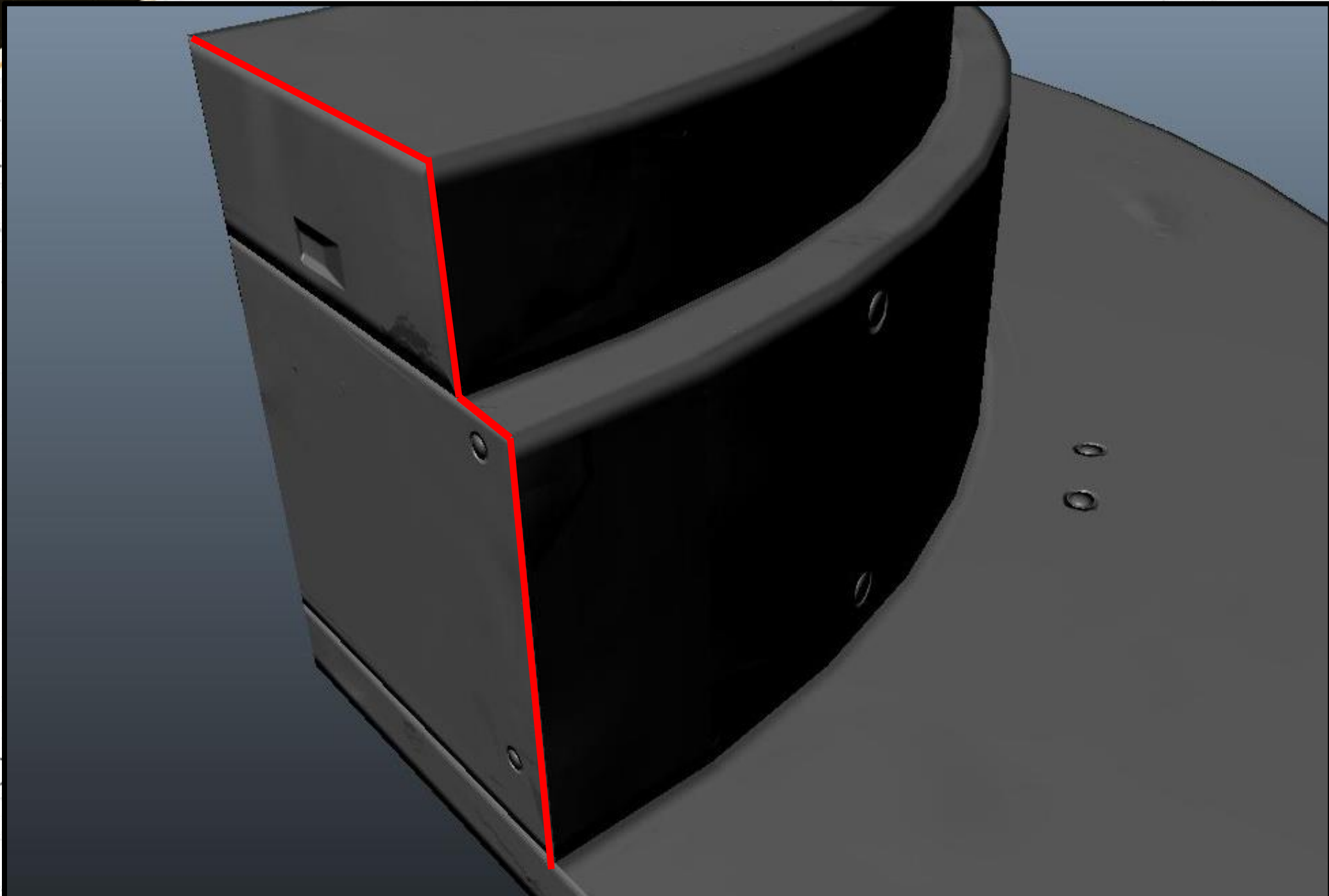
High Quality

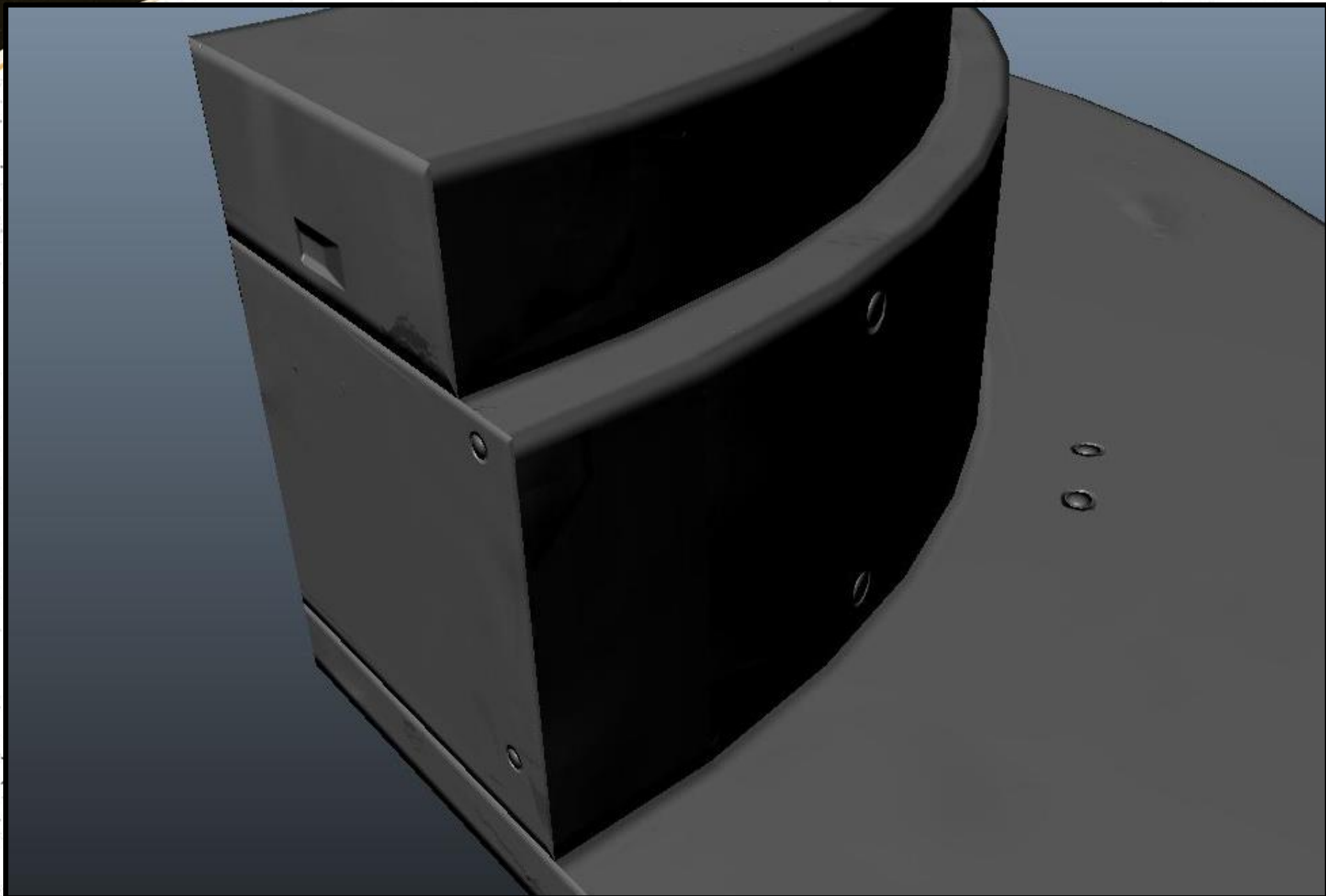
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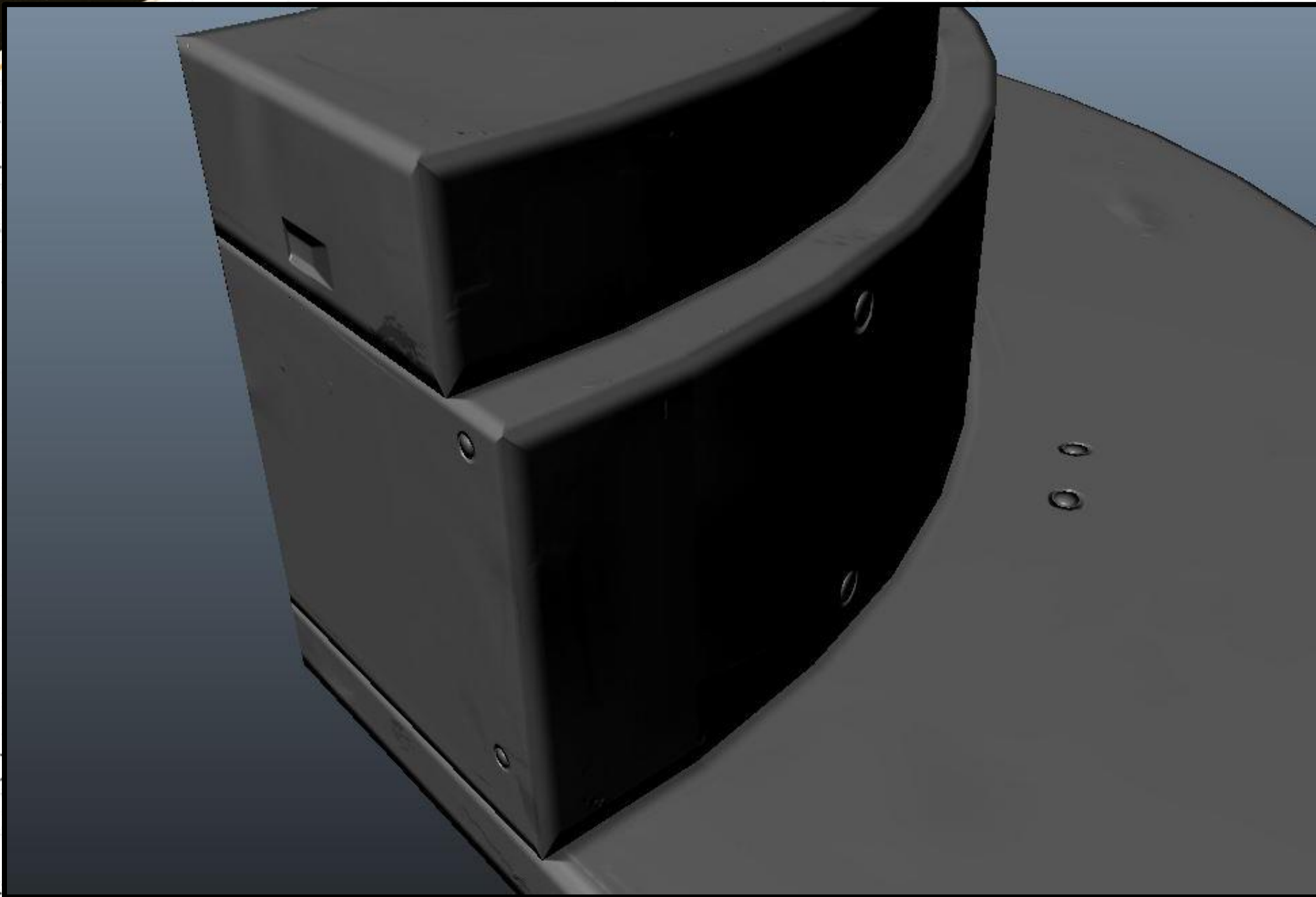


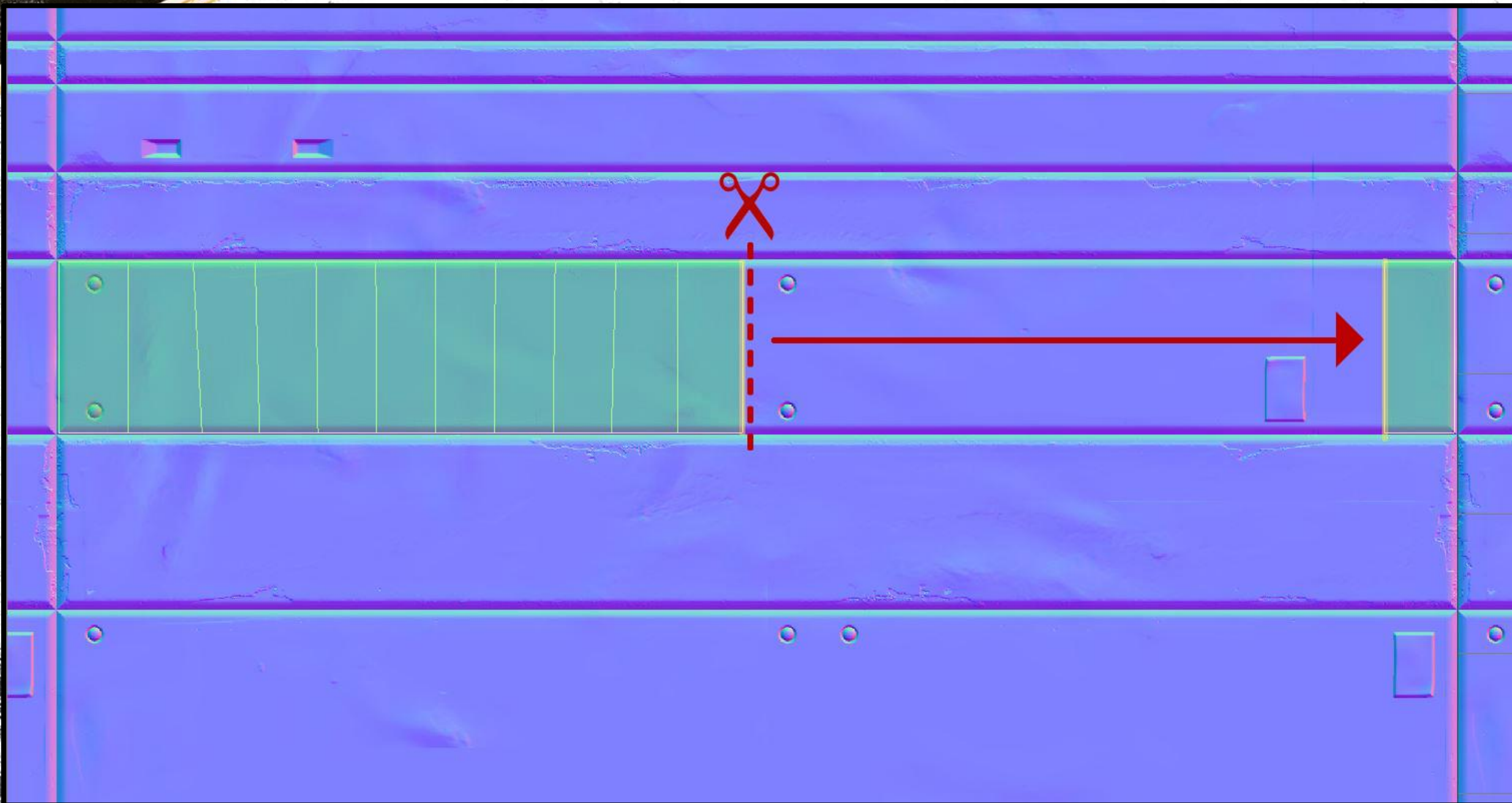


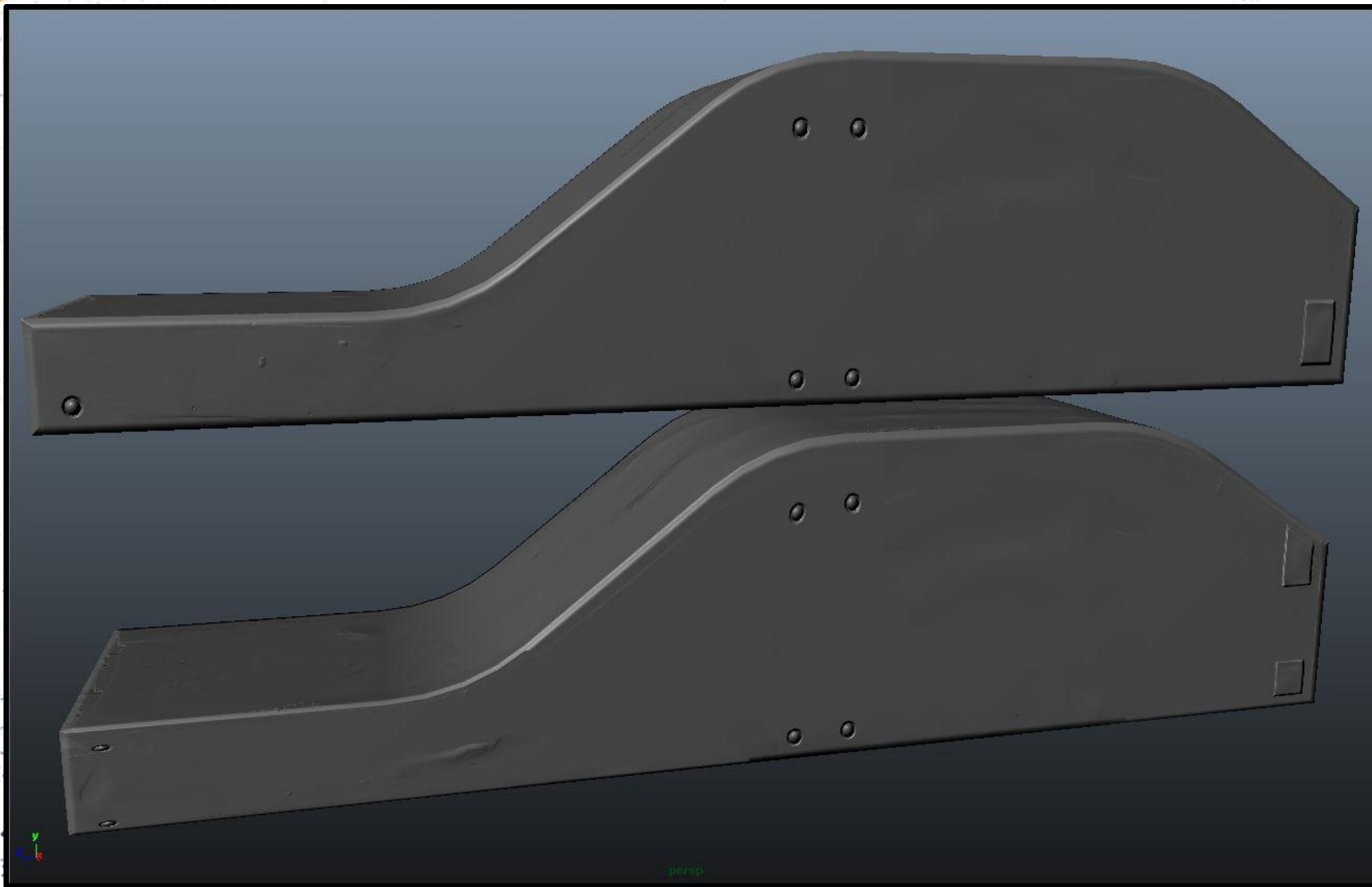


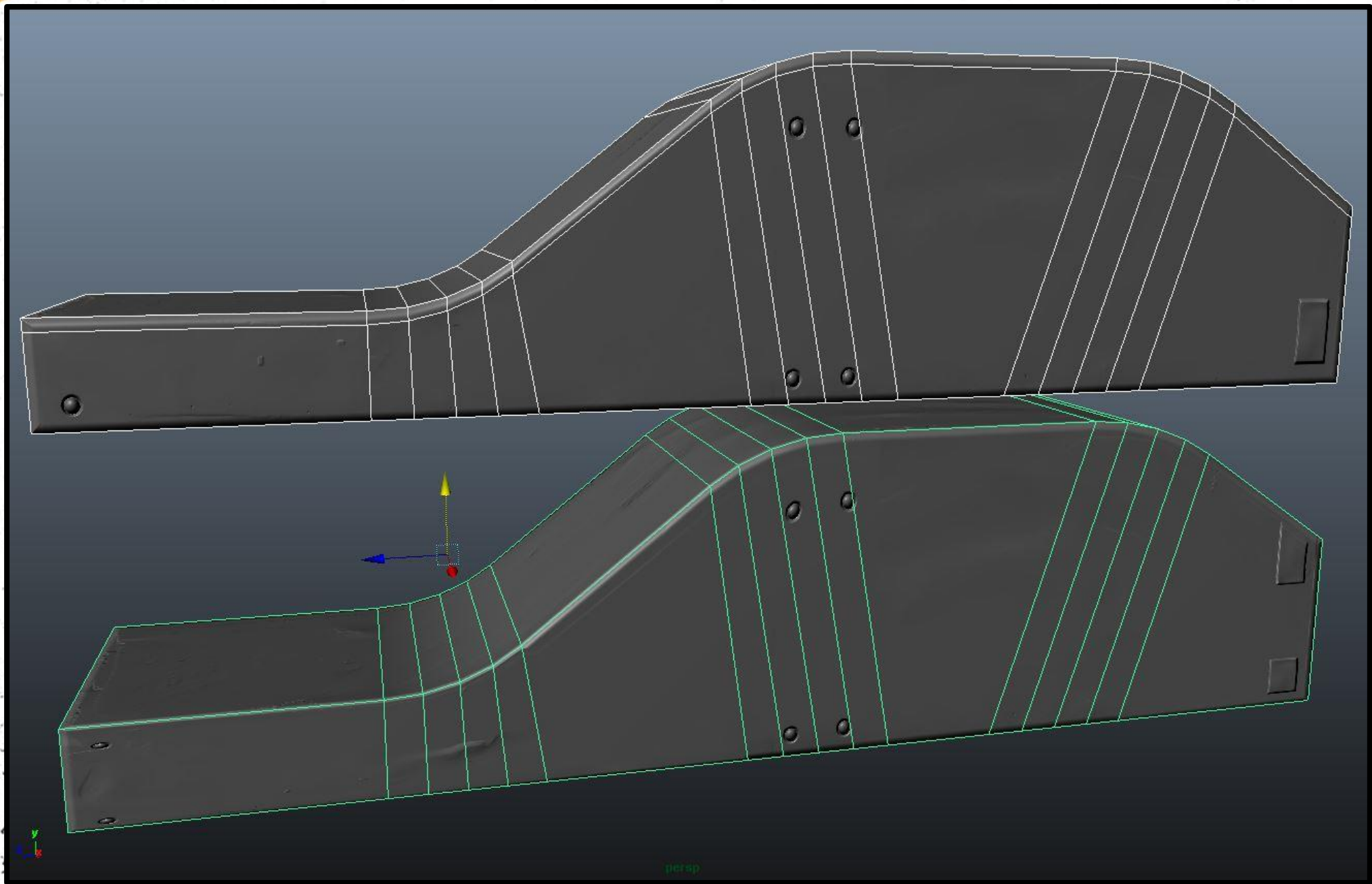


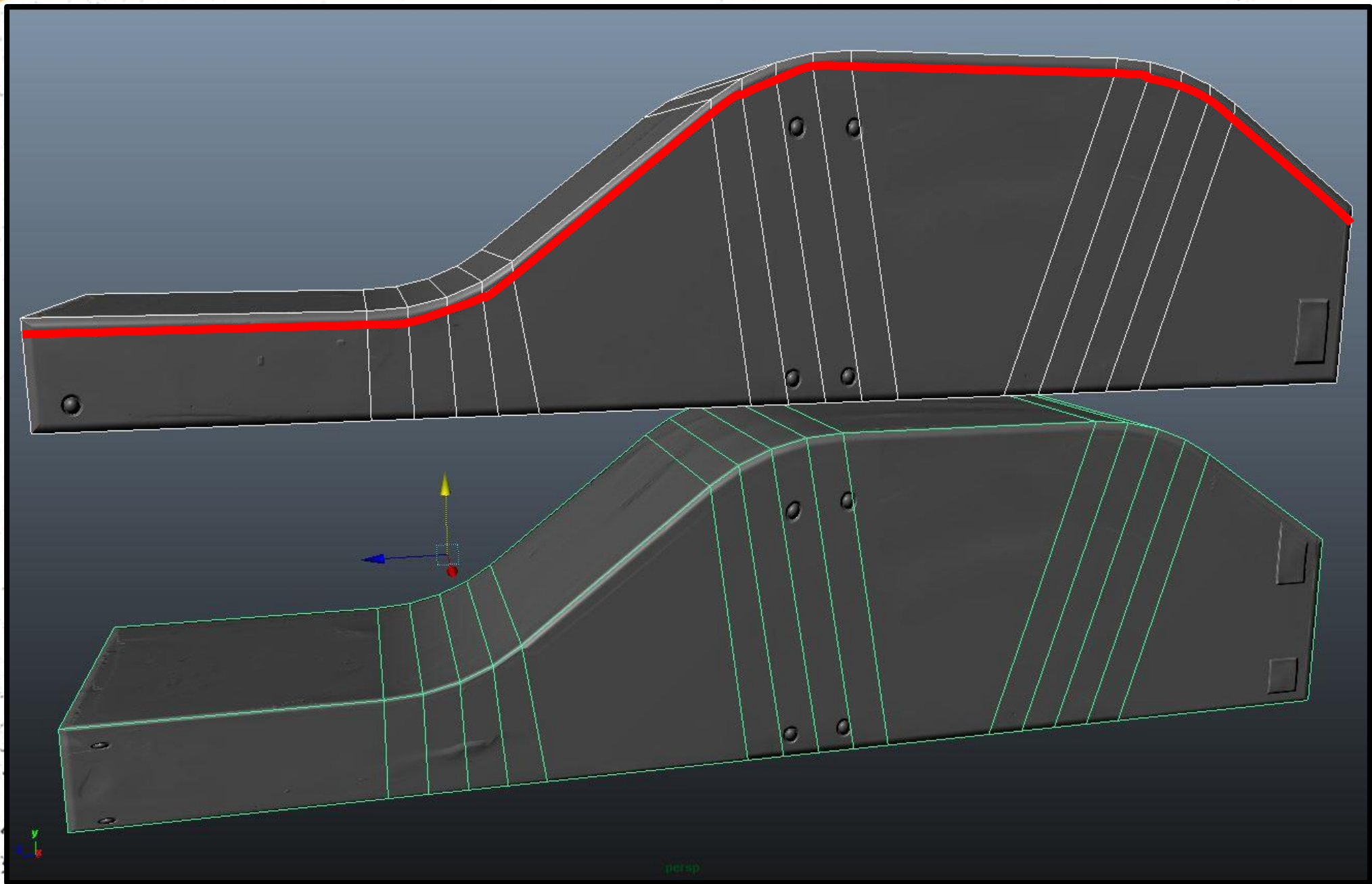


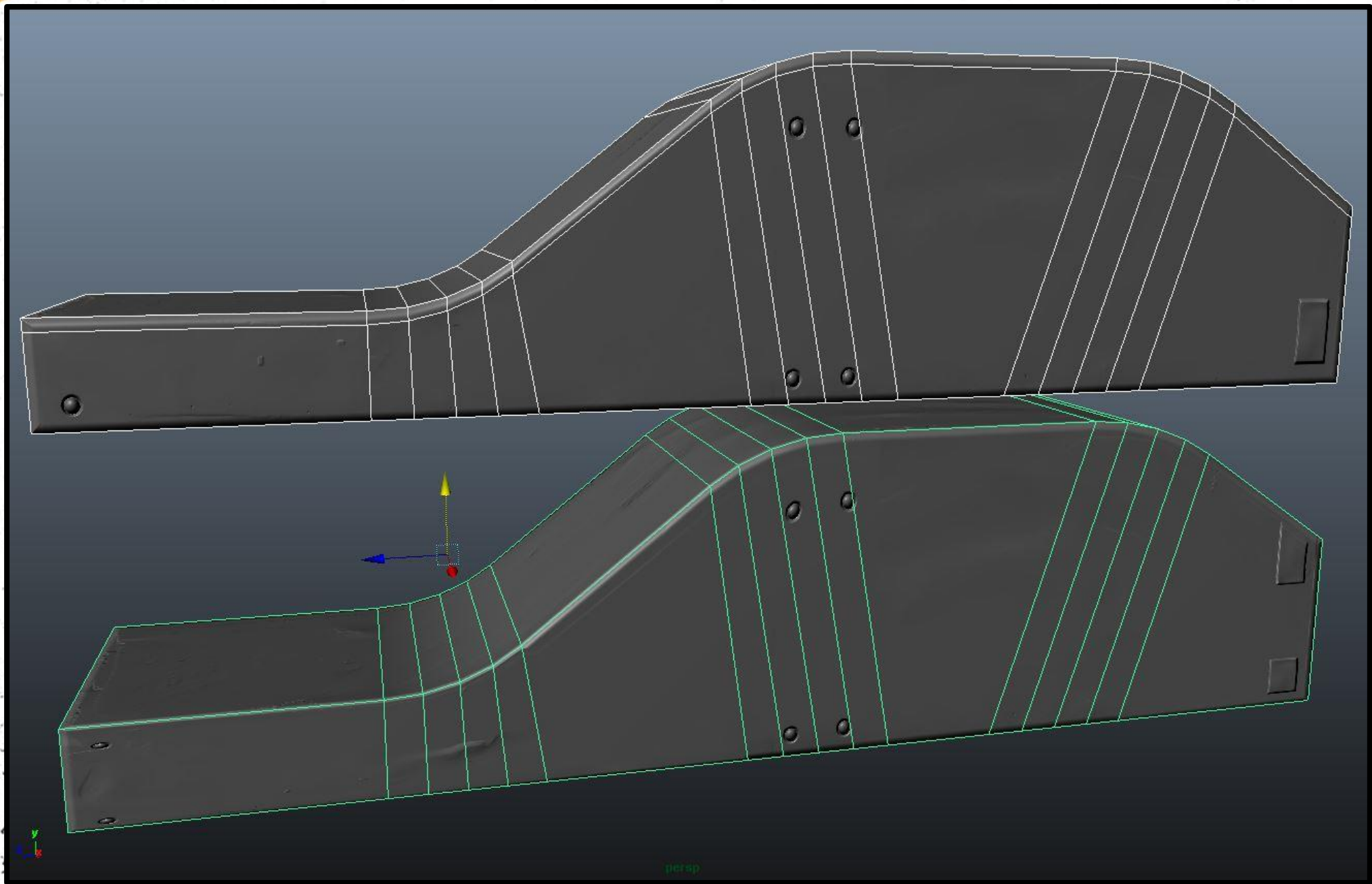


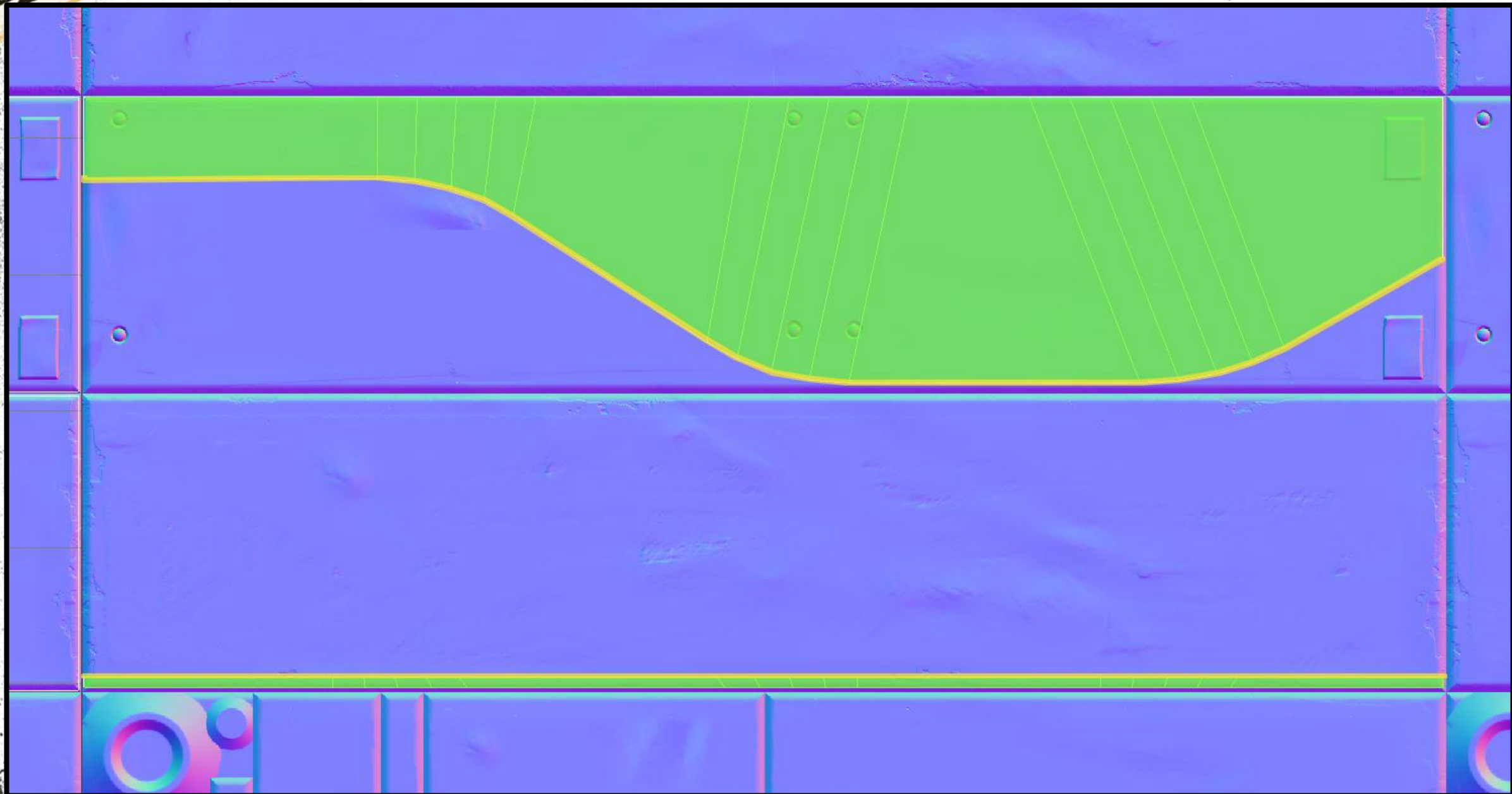


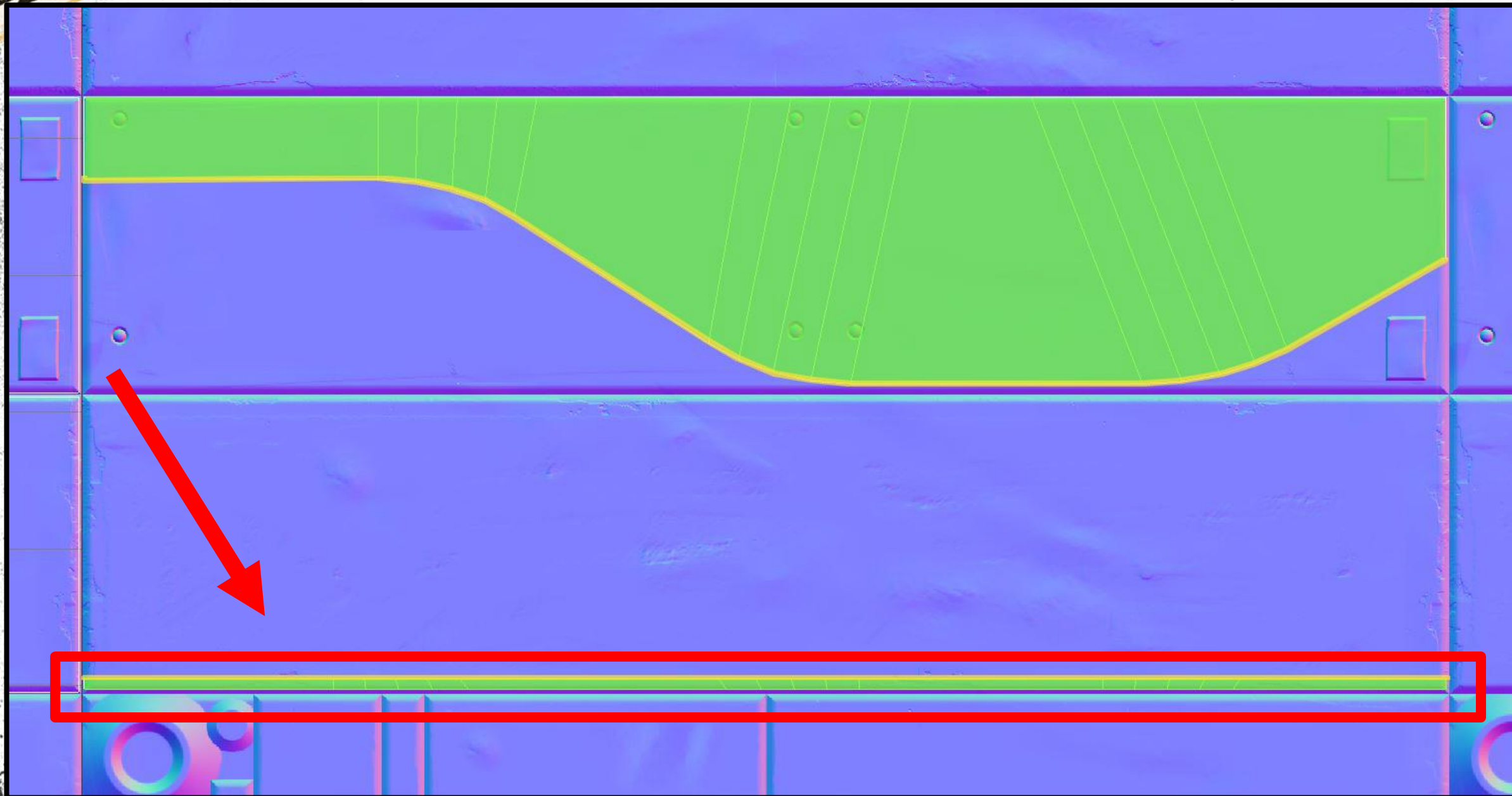


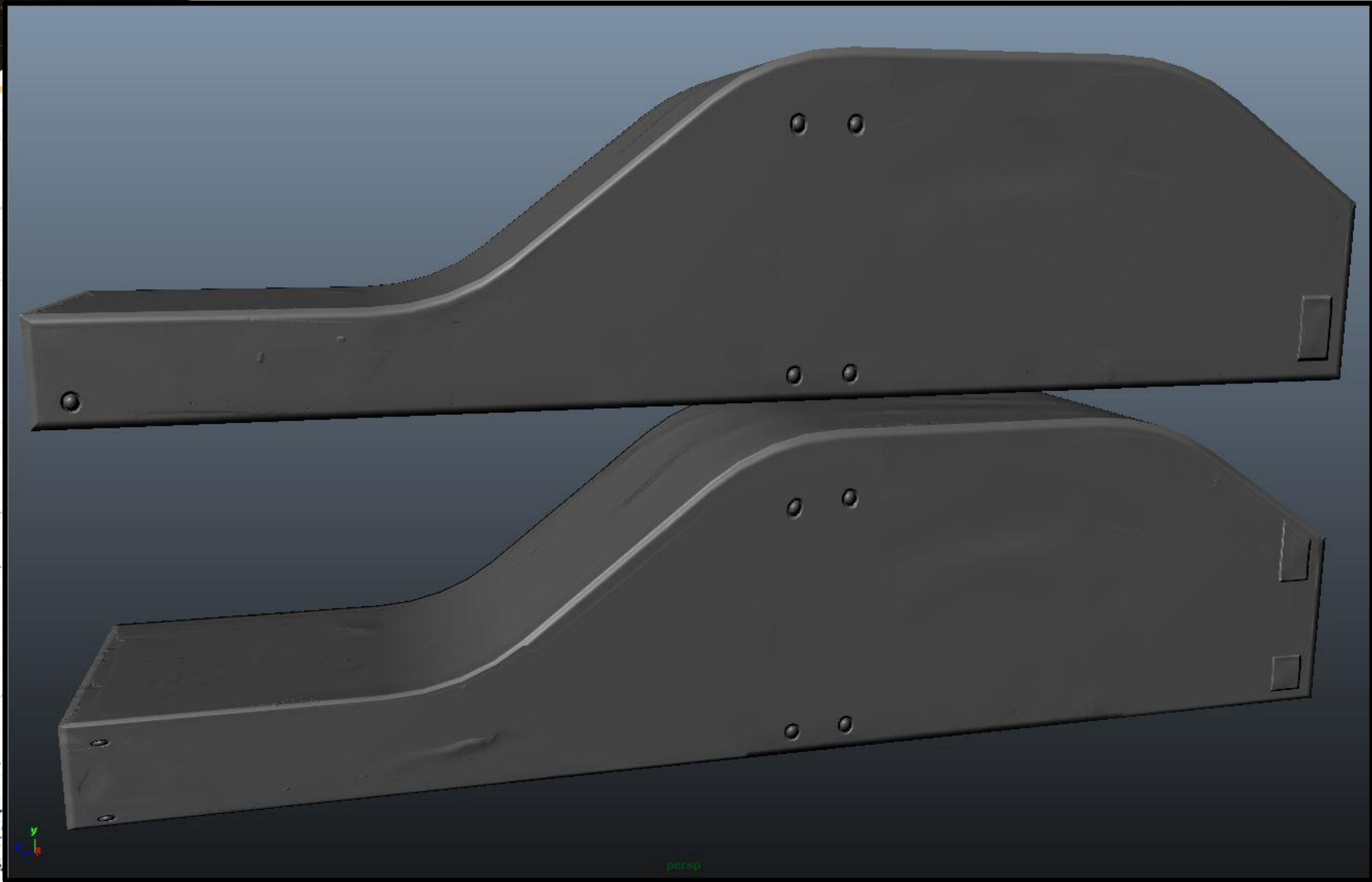












EXAMPLES







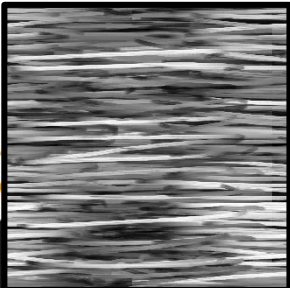
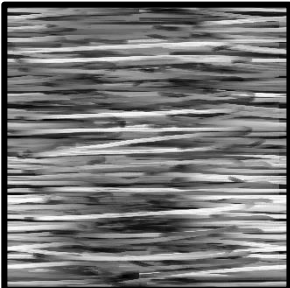
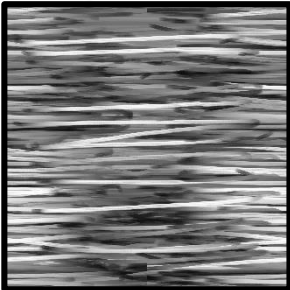
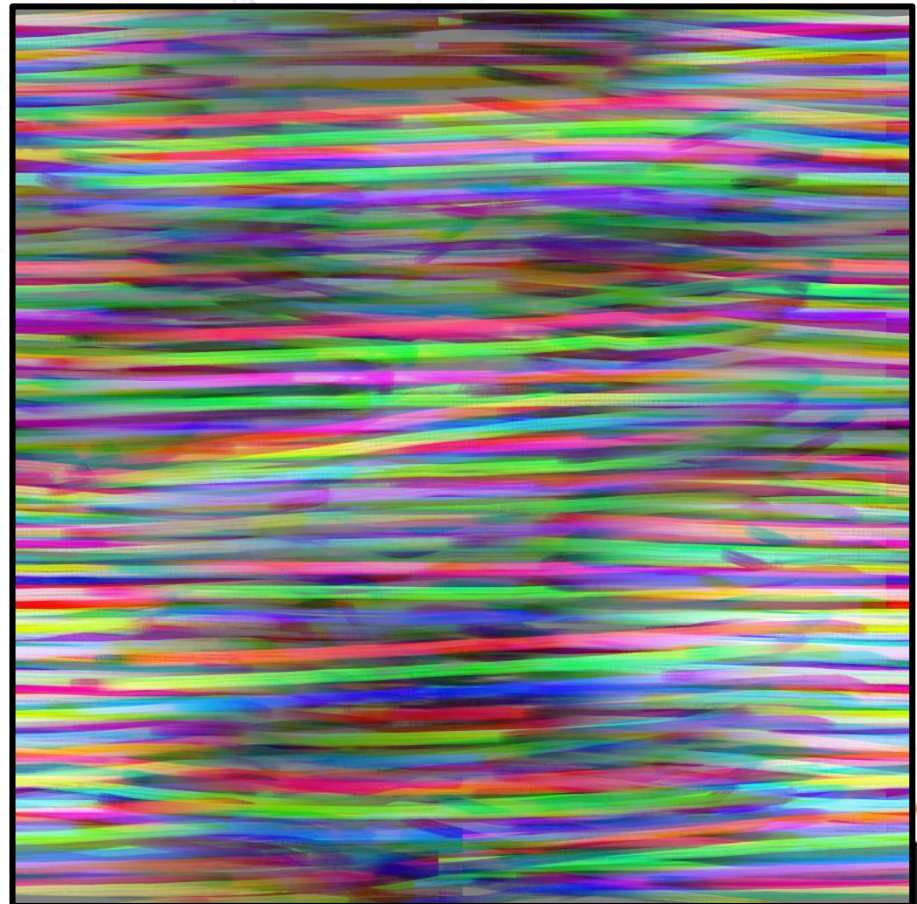
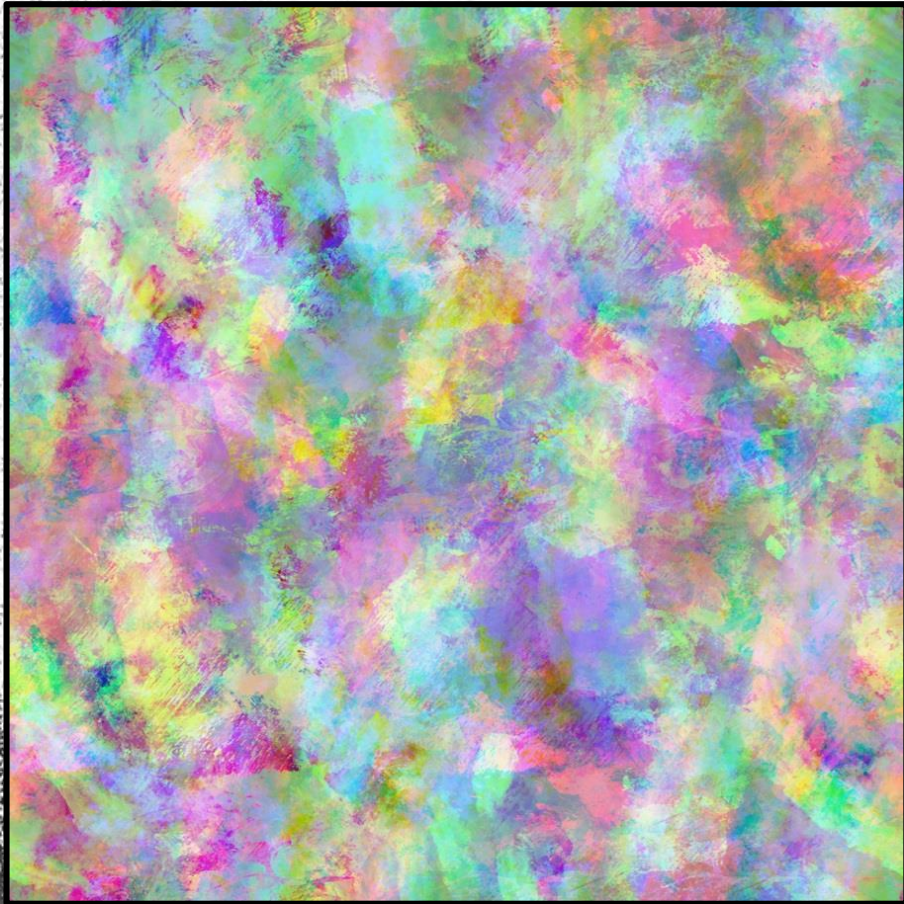
PROCEDURAL BRUSHSTROKES



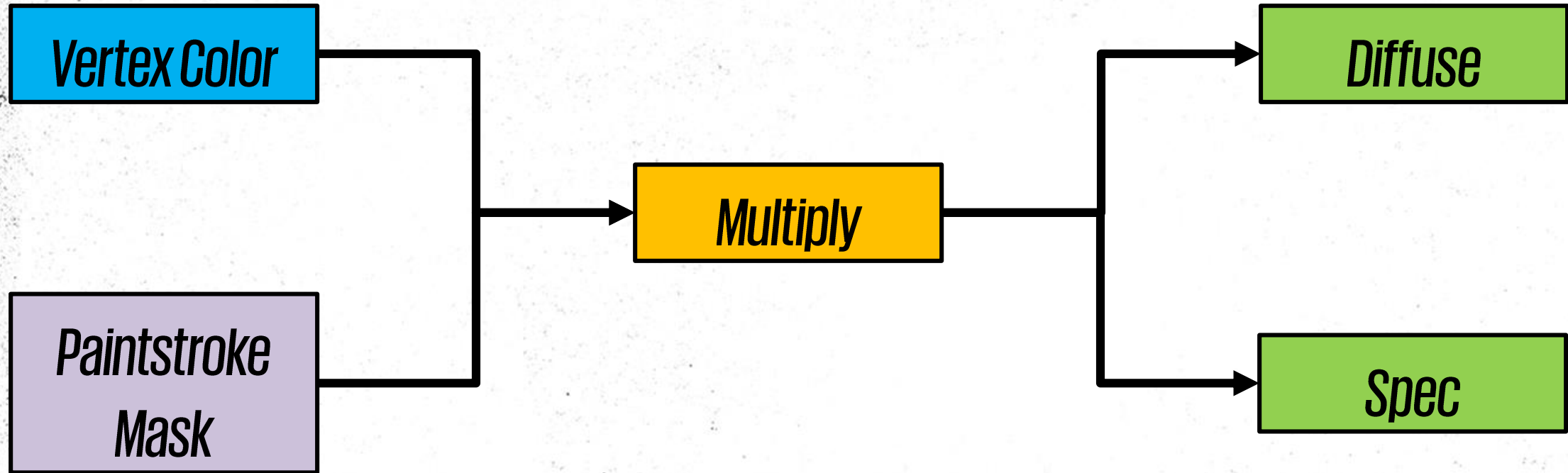




BRUSHSTROKE MASKS



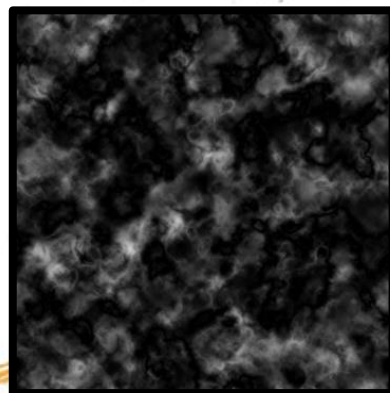
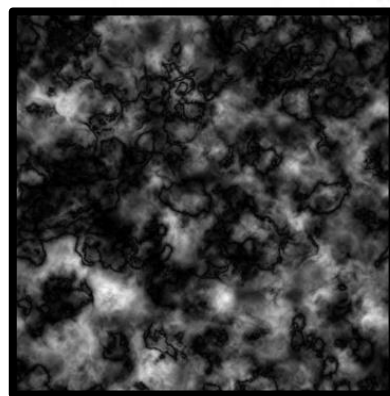
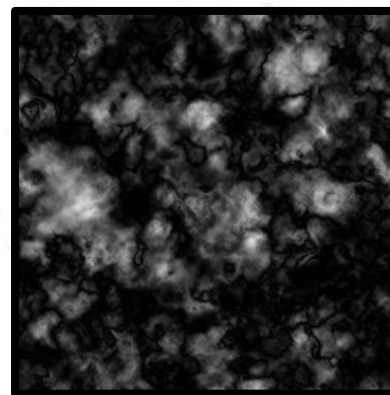
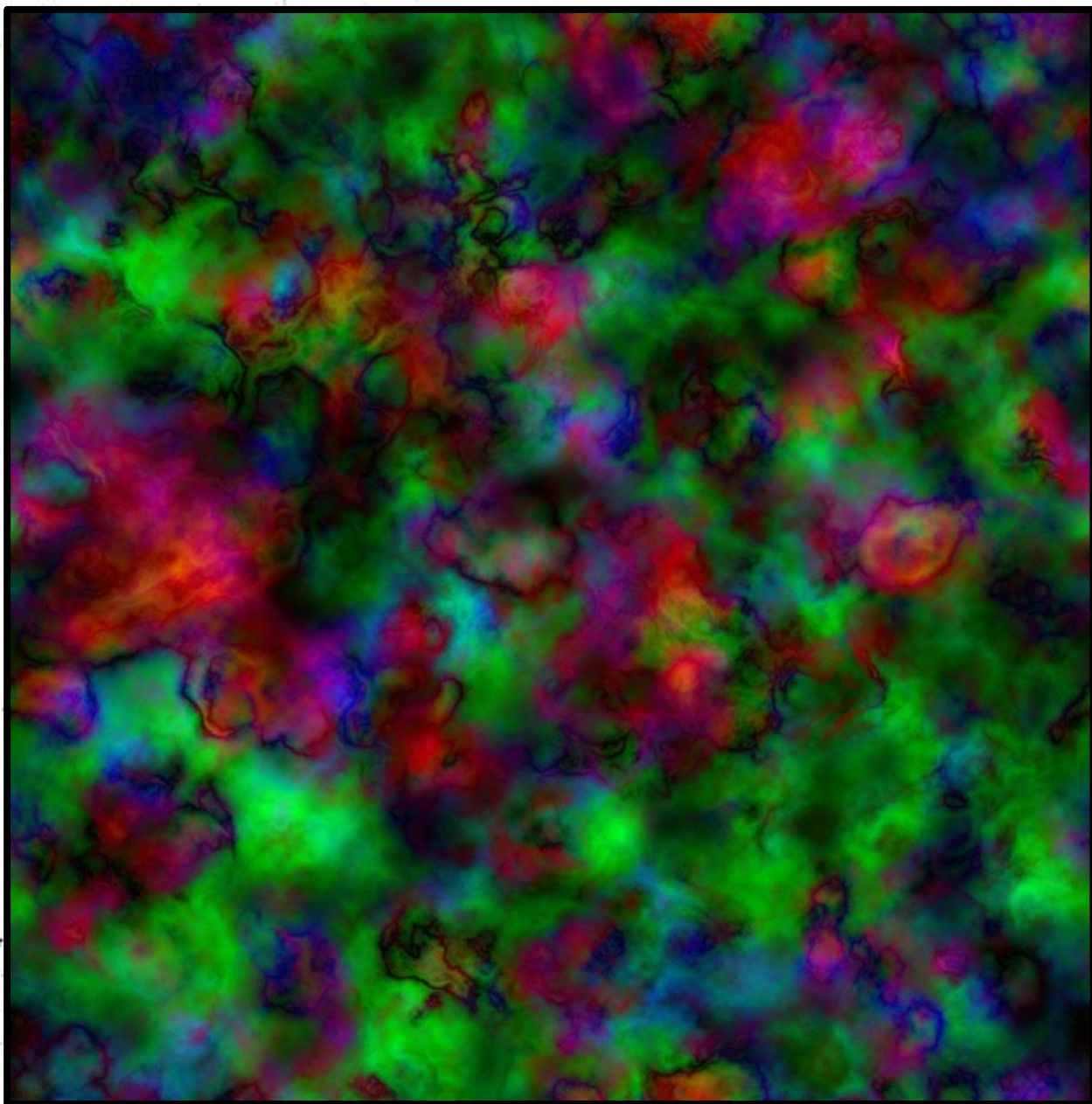
SHADER



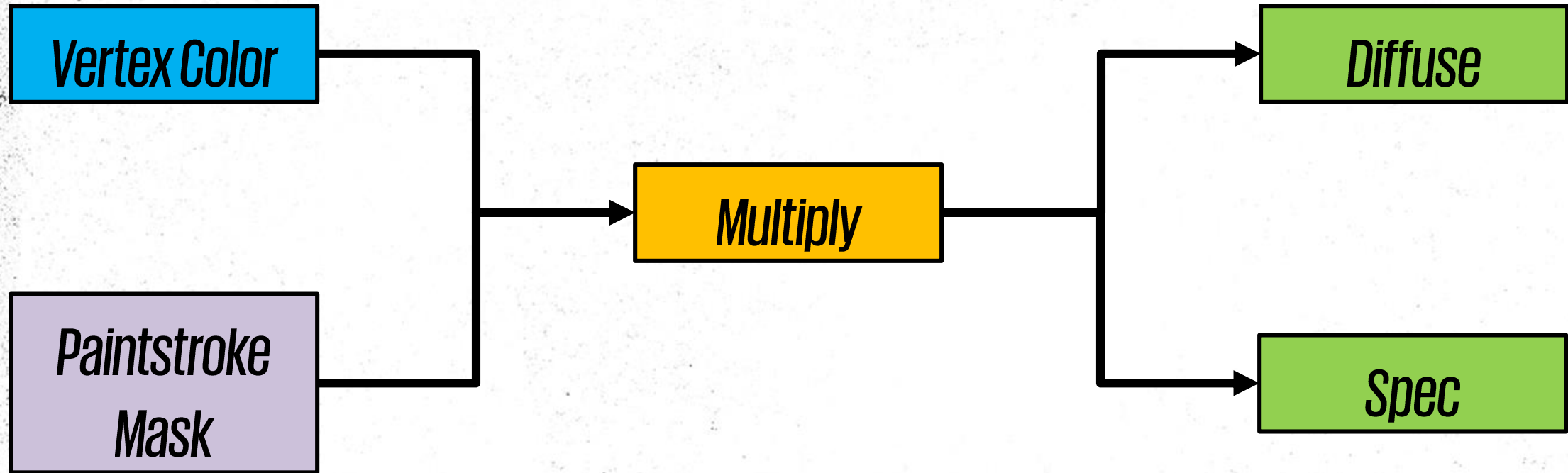


VIDEO

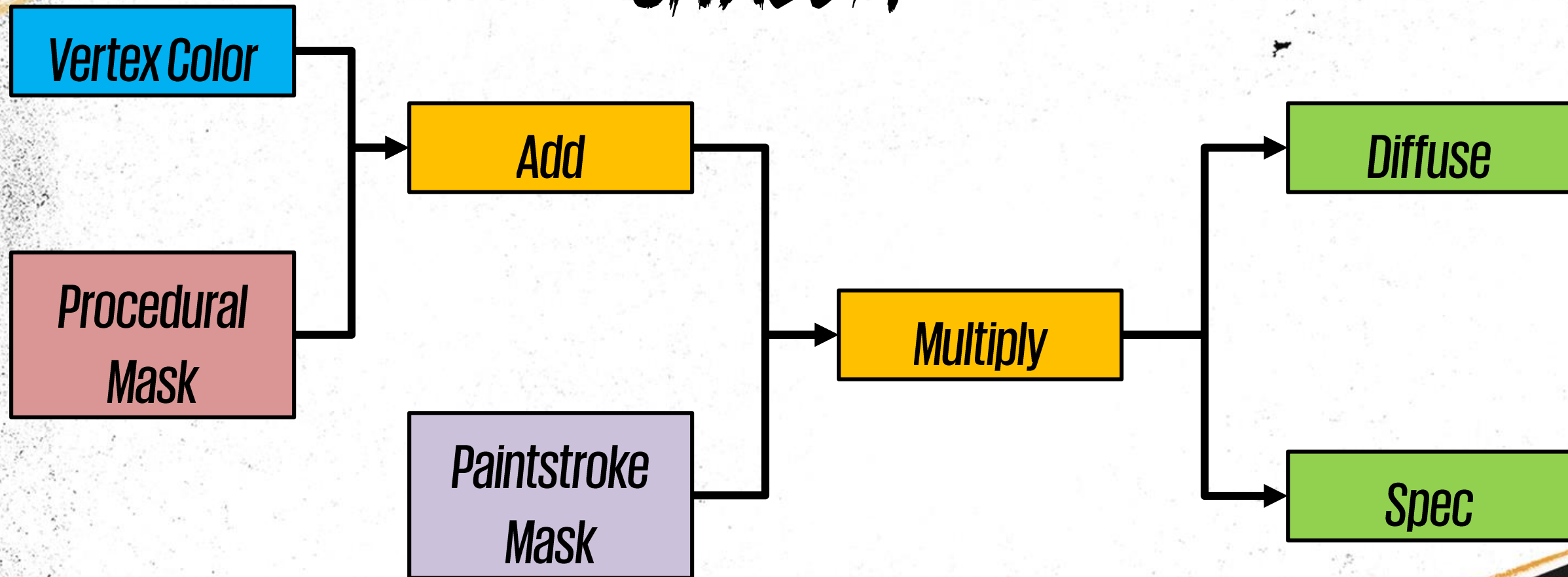


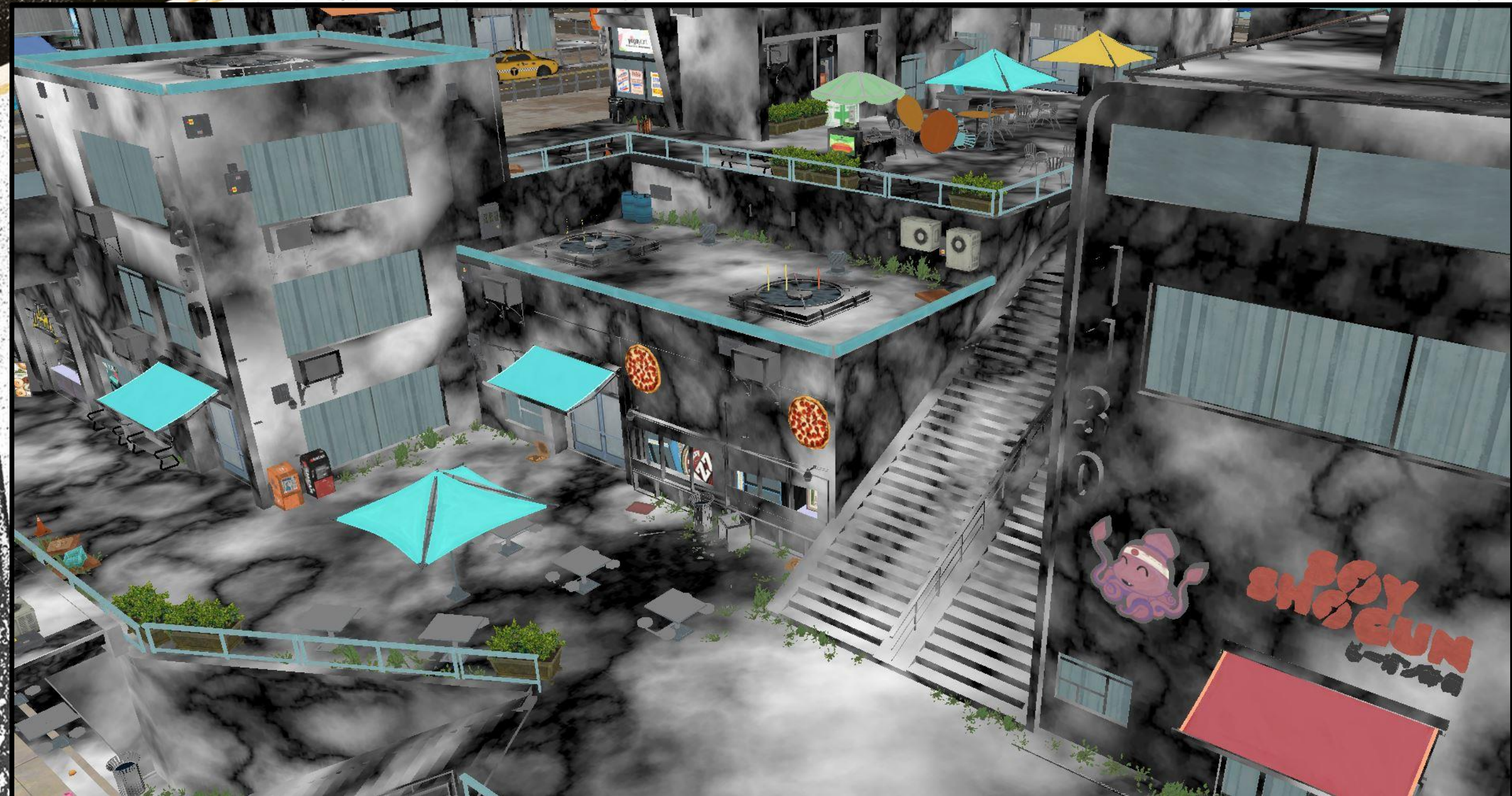


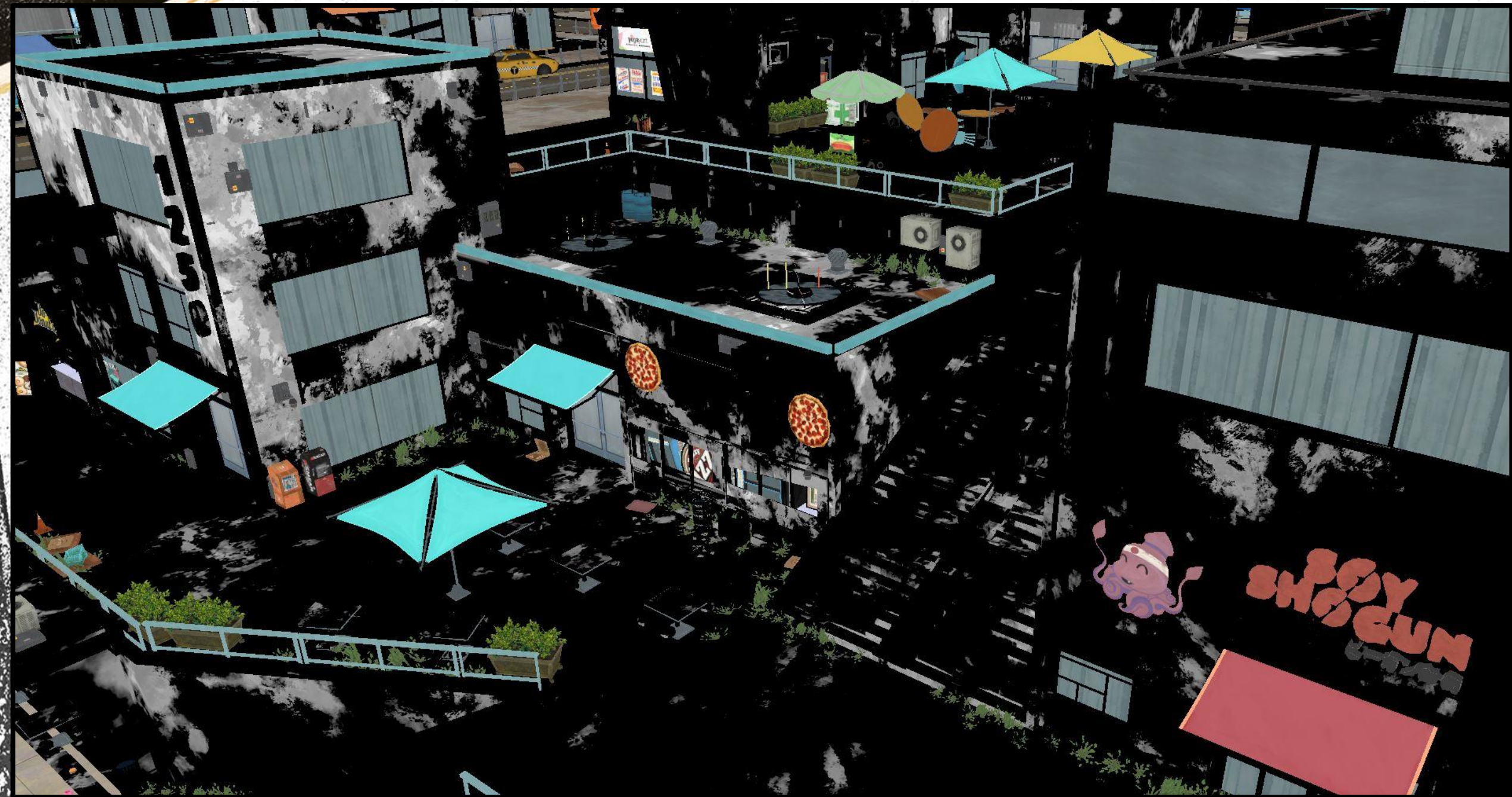
SHADER



SHADER









VIDEO



Verts:987 Tris:942 Visual Effects:0 Models:1 Lights:0 Actors:0 Variation 10:0
Cam Mode:Maya Cam:-31.3 43.8 -390.6 Far Clip:1000 FPS:29 PID:23424

CONCLUSION

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TIME - is the most valuable resource

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THE ULTIMATE TRIM – there is no excuse for having ugly low poly edges

CONCLUSION

TIME - is the most valuable resource

THE ULTIMATE TRIM – there is no excuse for having ugly low poly edges

PROCEDURAL BRUSHSTROKES – you probably don't need brushstrokes... But



Contact information

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Twitter: [@TeamMorten0](https://twitter.com/TeamMorten0)