



BaxterTM

OF CALIFORNIA

Sustainable Packaging Design

By Jimmy Blanck

Concept

The product chosen for an eco-friendly package design is Baxter's line of shampoo, conditioner and hair gel. Both the shampoo and conditioner will come with cardboard labels fixed to them as opposed to a full box so there is less material. The hair gel will come packaged in a 5mL glass container with a wooden lid instead of a full or partial plastic container.

After discussing the physical package design with peers, it was decided that it would be best to make a sleeve for the soap rather than two separate pieces of cardboard attached with a string. The layout was updated accordingly and work began on the 3 oz tin for the hair gel. For materials, a dark cardboard material was decided on. This cardboard will have portions of the packaging design printed and etched onto it. As an extra detail, the Baxter logo was engraved onto the soap as well. Under 10% power and 100% speed, the laser cutter was able to engrave the design without destroying the soap. In the event the laser-engraving did not work, the backup plan was to melt down the soap and pour it into a 3D printed mold.

Sketches

3 BBBB BBB

Baxter
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SHAMPOO

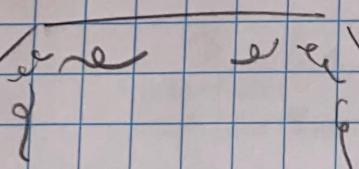
Baxter
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CONDITIONER

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GEL

BBBB BBBB BBB

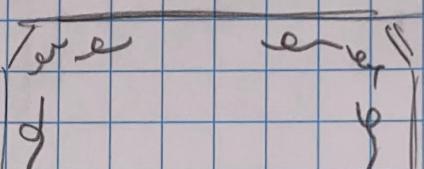


Baxter

Σ SHAMPOO ↗

1

ALL NATURAL

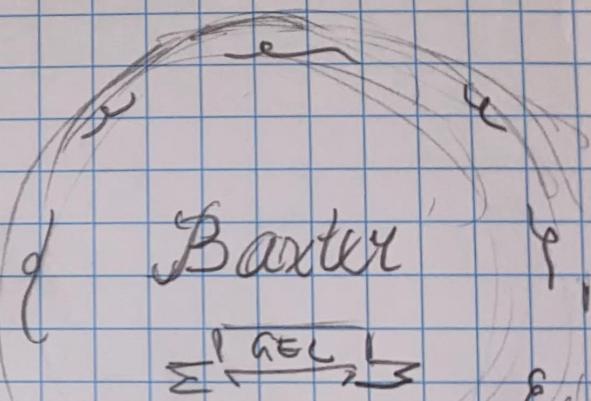


Baxter

CONDITIONER ↗

2

ALL NATURAL

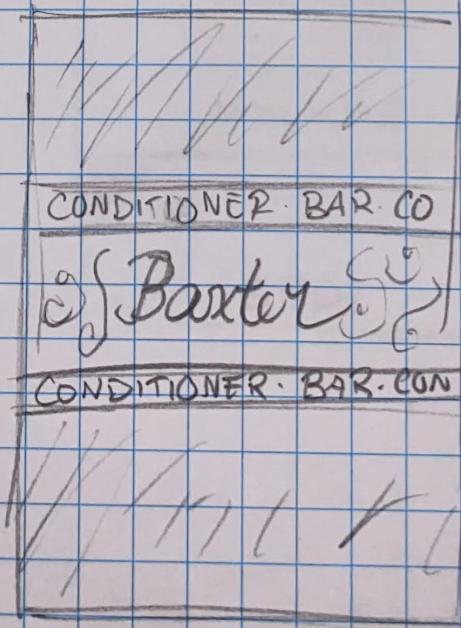
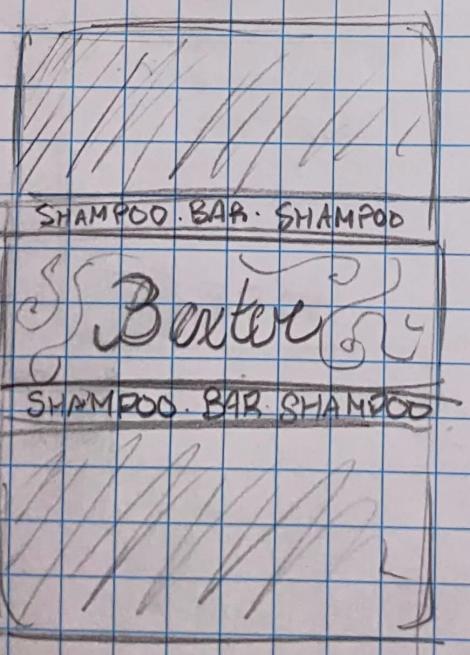


Baxter

Σ GEL ↗

3

ALL NATURAL



6

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SHAMPOO BAR

WHEAT PROTEIN, COCONUT

3.7 OZ

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CONDITIONER BAR

3.7 OZ

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HAIR GEL

^(UP)
Baxter SHAMPOO

WHEAT PROTEIN
COCONUT EXTRACT
VITAMIN E
MINT SCENT

3.7 OZ

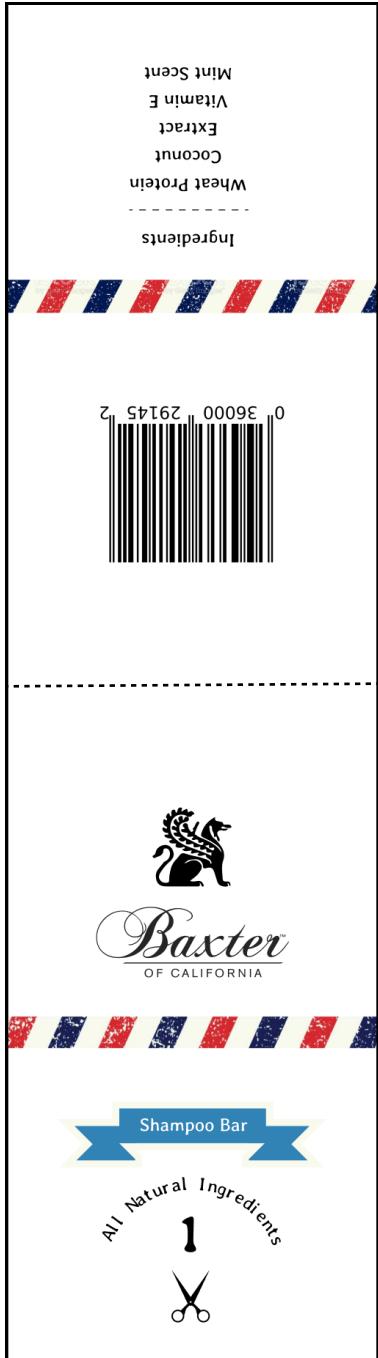
^(UP)
Baxter CONDITIONER

WHEAT PROTEIN
COCONUT EXTRACT
VITAMIN E
MINT SCENT

3.7 OZ

HAIR GEL

Dielines



Materials

The new soap bar packaging will be using 100% recycled paperboard with soy inks for the labels. They also use less total material than a standard soap box. Some parts of the label will be engraved and will not require any ink.

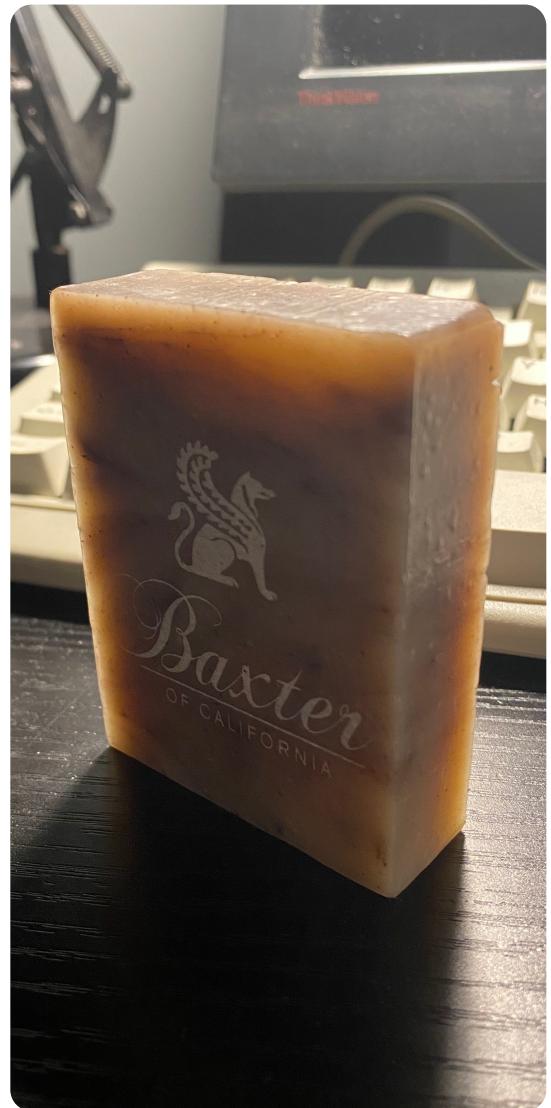
The gel package will have a glass bottom and a wooden top. No plastics will be used in any of the packaging. Although the glass weighs a bit more than plastic, the products combined do not weigh more and will be shipped locally so the cost of shipping and fuel required will not increase.

Laser-Engraved Soap

Prior to creating a 3D mockup, it was necessary to see how an actual bar of soap would look after being laser engraved. I predicted that it would become indented wherever the laser touched, the same as a laser-engraved piece of wood. However, this was not the case. The engraving actually became raised and lighter in color.



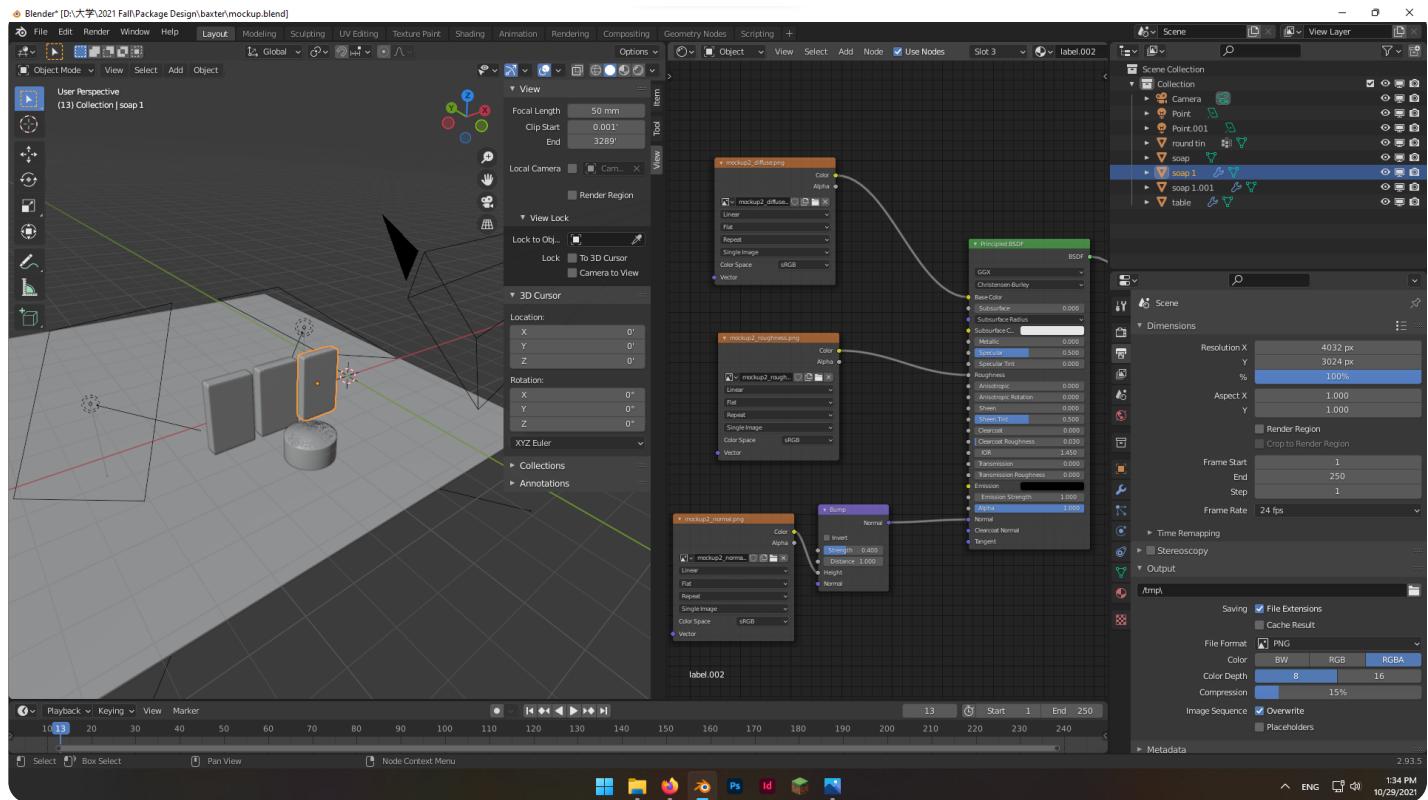
Engraved soap bar under direct lighting.



When lit from behind, the soap appears translucent and more saturated around the edges. This is the subsurface scattering effect I mimic in my render.

3D Layout

The software chosen for rendering the mockup was Blender because it gives finer control and allows for creation of custom materials that mimic real-life properties. It was also necessary to create realistic engravings on the packaging material and soap which would not be possible using Dimension's assets. Here is a screenshot of the scene with the lighting and camera setup on the left and material node editor on the right. There is a lamp to simulate indoor lighting and a blueish area light to simulate light coming in from the window.



My Blender workspace, showing the 3D layout and lighting on the left and material node editor on the right.

Final Render

