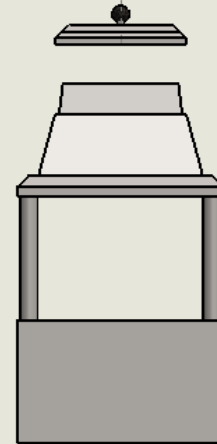
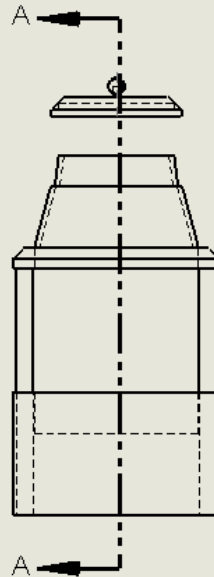
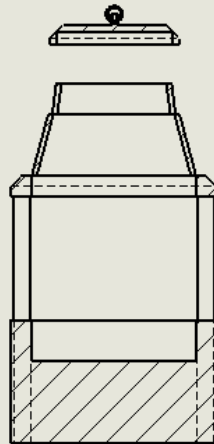
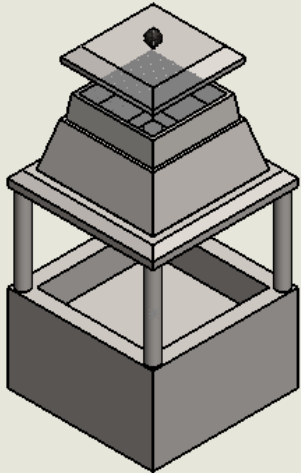


SafeLid Fire Pit

Created By: Kevin Nikolet



SECTION A-A

	UNLESS OTHERWISE SPECIFIED:	NAME	DATE	
	DIMENSIONS ARE IN INCHES	DRAWN		TITLE: Safelid Fire Pit By: Kevin Nikolet
	TOLERANCES:	CHECKED		
	FRACTIONAL ±	ENG APPR.		
	ANGULAR: MACH ± BEND ±	MFG APPR.		
	TWO PLACE DECIMAL ±	Q.A.		
	THREE PLACE DECIMAL ±	COMMENTS		
	INTERPRET GEOMETRIC TOLERANCING PER:			

PROPRIETARY AND CONFIDENTIAL

The Problem:

Whenever a person uses their outdoor fire pit the following problems may occur:

- Smoke is able to move freely because the fire is completely open, allowing the smoke to enter the person's home if the window(s) is/are open.
- Since fire can be a serious hazard it has to be watched by someone, even if it is dark outside and the mosquitoes are out or anything else that could disturb them.
- After rain hits the fire pit is full of dirty water and has to be cleaned out. If a storm moves in while the fire pit is currently active, then you are left with wet logs and ashes afterwards.
- Cleaning out dry ashes inside the fire pit can sometimes be a real pain if you don't have the right type of fire pit.

The Solution:

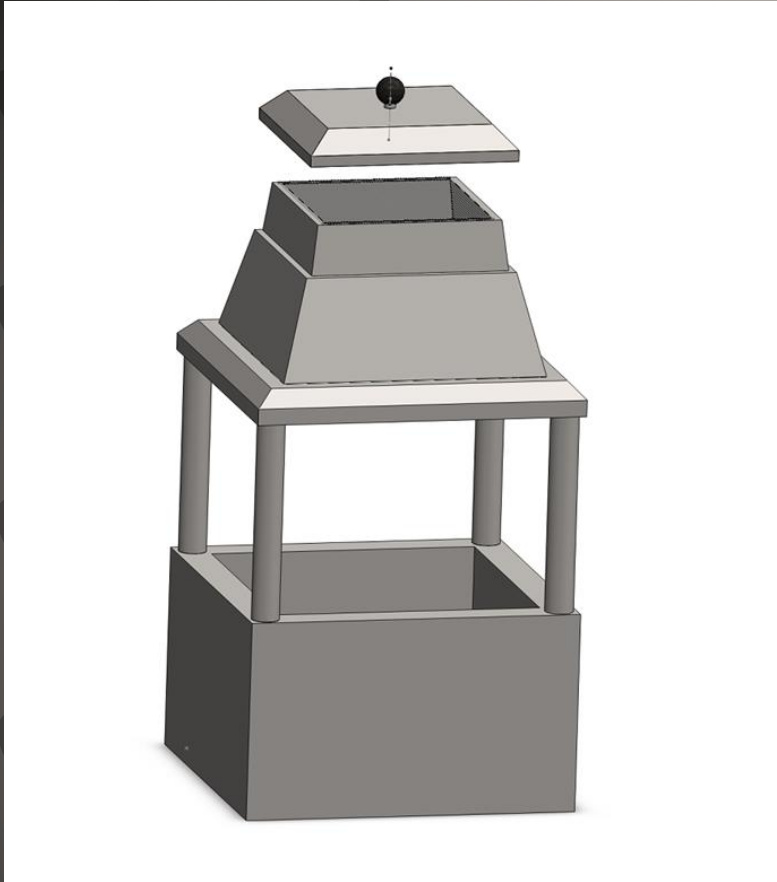
To make sure the smoke from the fire isn't going to possibly end up in one's face or enter the home; a hood will tame the fire and direct the smoke upwards.

The hood is capable of being lowered over the fire so that the possibility of the fire causing something outside the pit is prevented. Don't feel like watching the fire anymore? Well now you are able to leave it unattended.

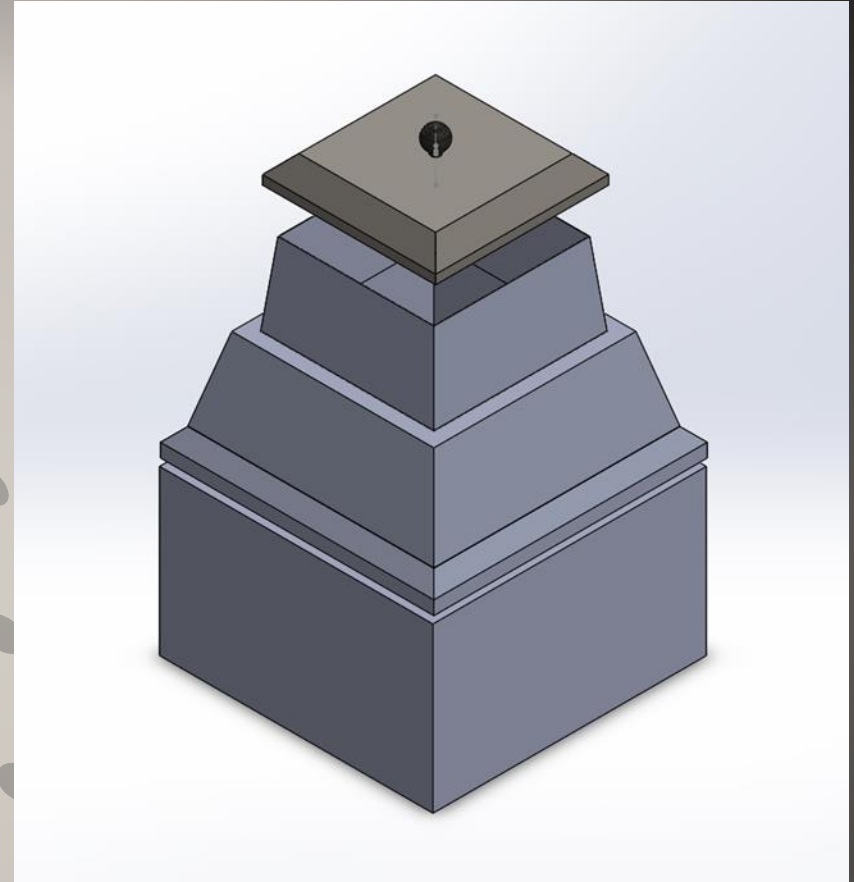
Water can make a person's fire pit a disaster, but thanks to the fact that this fire pit has a lid over it the rain water cannot collect inside the fire pit. Besides, next time it gets used there is no wet mess to clean up.

The steel pit where the ashes collect can manually be taken out for easy cleaning.

Open and in Use



Closed and Not in Use



The Safe Lid Fire Pit consists of 4 pulleys that lift/lower the hood above the main base of the fire pit. The unattached upper-most lid is only to be used when the fire pit is closed and not in use. (Hard to indicate in the left picture) There is a metal screen at the top of the hood to prevent objects from falling into the active fire.

The Costs:

The current price of Stainless Steel per pound (U.S. Currency): \$1.29/lbs.

I have predicted the total weight of stainless steel that I will need to buy to be around 130-150lbs, which will end up costing between \$168 and \$194 (plus tax).

The costs for the total amount of silicone needed to create the air-tight seal will approximately cost \$10 (plus tax).

The estimated cost of stone is \$4-\$7 per sq. ft.

For a (L*W*H) [5ft.*5ft.*3ft.] standard model... the total cost of stone would end up between \$240 (minimum) and \$420 (maximum).

The overall costs of everything else needed to make the SafeLid Fire Pit (such as the pulleys, rubber ball, etc.) range between \$50 and \$80 (plus tax).

The total estimated cost on average for the SafeLid Fire Pit ended up being \$584 (plus tax).

The Statistics:

Stainless Steel is the best metal to use because of capability to withstand up to 1650 degrees Fahrenheit

Silicone can withstand temperature extremes of 550 degrees Fahrenheit.

Silicone will be used where the edges of the hood meet the top of the base in order to create a strong air tight seal around the fire.

The four pulleys used to lift/lower the upper hood are located inside the stainless steel pipes. A manual crank, located at the upper right hand corner on one side of the base, operates the 4 separate pulleys simultaneously. The stainless steel beams are lowered into the base of the fire pit as the upper hood is lowered.

A rubber ball is used on the top of the upper-most lid for easy handling and to give the person maneuvering the lid a strong grip.

The standard model (open and in use) is 5 feet in length, 5 feet in width, and 7 feet tall.

The Market:

According to the American Society of Landscape Architects (ASLA), which surveys its members each year about the popularity of more than 15 outdoor living features, fire pits and fireplaces are the most sought-after items this year! That means that people are likely to want a new fire pit than a new grill in the USA.

18% of U.S. homeowners plan a patio or landscape addition or replacement in the next 2 years.

Over the past 5 years, U.S. homeowners spent an average of \$10,646 on their patio or landscape projects.

After looking at over 1000+ patents under “fire pit” not a single one of these even came close to my design. Due to the fact that my invention is so unique there is no competitor that can put me out of business.

Why I Came to Angel Pitch:

Every week, over the past 9 months I have been researching and working on my invention because I see the huge potential it has to be successful and profitable. When I first heard about Angel Pitch I knew this was my chance to make a statement. I am seeking to win the \$250 from Angel Pitch to help cut the costs of my ~\$600 prototype, which I will be making this summer. I am going to change the way people see “the average fire pit” in the future.

As a current member of the Young Entrepreneur Society (Y.E.S.) I want to show incoming UT students that Y.E.S. is a valuable organization and having a Y.E.S. member win the Angel Pitch for the second year in a row would go to show that Y.E.S. is growing and definitely worth being a part of. Last year’s winner was Joseph Strobbe with his “Silverback Casualty Extraction Pack” invention. Joe also happens to be the current leader of the Y.E.S. program and I have been working with him once a week since the beginning of the 2014 Fall Semester. I’m hoping my hard work will finally start to pay off and I can make my SafeLid Fire Pit a reality.