

# SOLOMON'S TEMPLE, The Altar of Burnt Offering- Study Art 1.1

Bro. Andrew Johnson, 2025

## DISCLAIMER:

Please feel free to use my work as a “jumping-off point,” but please be careful to NEVER use it to replace your own Biblical study or thought! Bible study is a wonderful, personal, and essential part of learning and growing in faith, and should never be sidelined or replaced by ANY artist's rendering.

## Intent:

To provide visuals fit for presentations or classes. This material was created as part of a personal study on the structures and furnishings of Solomon's Temple. I created a full breakdown of temple measurements and descriptions here: <https://www.biblicaltoolbelt.com/l/solomons-temple-study-chart/>

## Important Notes:

This art represents my personal suggestions of some of the appearance and mechanics of the Altar of Burnt Offering built for Solomon's Temple.

## Description:

“He made a bronze altar twenty cubits long, twenty cubits wide and ten cubits high.” (2 Chronicles 4:1) is the only description in all of Scripture that gives us any indication of what Solomon's Altar looked like.

A great deal of attention is given to the work that Hiram, the skilled bronze worker (not Hiram King of Tyre 1 Kings 7:13-14) completed for the temple. Solomon's pillars, the Bronze Sea, and the laver carts required sculpting and casting that would have required great skill.

Oddly, it does not appear that the Altar of Burnt Offering was part of his purview. In 1 Kings, the altar is entirely omitted from the Temple description and is included in only the most rudimentary terms in 2 Chronicles 4. One reason for this might be the lack of detail/ sculpture included in the work (we'll get to that momentarily). This doesn't mean that the Altar wasn't striking; after all, it was one of the most active areas of a Temple that was to be exceedingly magnificent (1 Chronicles 22:5). However, its minimal description does perhaps suggest that it did not contain any special sculpture or imagery.

So, based on what we know of this altar, what can we surmise? And are there clues elsewhere in Scripture that might provide us with additional information about its potential construction?

## Materials, size, and possible implications.

First, we know that the Altar was bronze. We assume that this is a slight variation on the first Altar of Burnt Offering from the Tabernacle (acacia wood overlaid with bronze). There may be spiritual significance to this change, but for now, let us only focus on the physical elements of construction.

The Altar was bronze, but it was also quite large. It was 30 feet wide and long (a little over 9m) and 15 feet high (about 4.5m). It would not be possible to place wood and offerings on the altar without some way to ascend the height. For this reason, many scholars believe there was a ramp, possibly a stairway, that was built off of one side of the Altar for access.

One objection some have is that God required that the priests do not “go up by steps” to His Altar, lest the nakedness of the priest be seen (Exodus 20:26). However, as I’ve reasoned before (see my views on the Altar of Burnt Offering for the Tabernacle) I don’t believe this is a difficulty in the case of the Temple of Solomon because:

1. The commandment in Exodus 20 was given at a time when the priests had not yet been given their priestly garments (which included undergarments)
2. The only type of steps that would have uncovered their nakedness would have been very steep steps, such as those on a ladder.

With the priests properly attired and no ladders used, it does not seem outside of possibility that a ramp or stairway could be used for the Temple’s Altar.

However, such a structure leads to a couple of questions:

1. Why was it not included in the dimensions given?
2. Was it also made from bronze?

#### **Here are some suggested answers:**

First, it is my view that the ramp, if it existed, was not made of bronze. Priestly attire did not include footwear (Exodus 28), meaning that priests would be walking barefoot while performing their duties. Imagine walking up a bronze ramp heated by hours in the sun barefoot, all while carrying offerings, wood, and other tools for maintaining the Altar. It would be excruciating if it were possible.

The size of the Altar hearth would also have been quite large, meaning that if ONLY the ramp was made of a different material, the work of the Altar would still have been dreadful. This is why the Altar is commonly depicted with a stone exterior surrounding it in most media.

However, if part of the Altar was made of stone, why isn’t that mentioned?

One answer may lie in a comparison with the Temple of Ezekiel’s Prophecy. The Altar of that Temple is presumably similar to Solomon’s Temple (many of the Temple measurements are fairly comparable). Let’s give the Altar in Ezekiel a closer look for a moment:

Ezekiel 43:13-17

“<sup>13</sup> And these are the measures of the altar after the cubits: The cubit is a cubit and an hand breadth; even the bottom shall be a cubit, and the breadth a cubit, and the border thereof by the edge thereof round about shall be a span: and this shall be the higher place of the altar.

<sup>14</sup> And from the bottom upon the ground even to the lower settle shall be two cubits, and the breadth one cubit; and from the lesser settle even to the greater settle shall be four cubits, and the breadth one cubit.

<sup>15</sup> So the altar shall be four cubits; and from the altar and upward shall be four horns.

<sup>16</sup> And the altar shall be twelve cubits long, twelve broad, square in the four squares thereof.

<sup>17</sup> And the settle shall be fourteen cubits long and fourteen broad in the four squares thereof; and the border about it shall be half a cubit; and the bottom thereof shall be a cubit about; and his stairs shall look toward the east.”

First, we have to note that this Altar uses a different cubit measurement (a Royal Cubit, approx. 22 inches) as defined in Ezekiel 43:13.

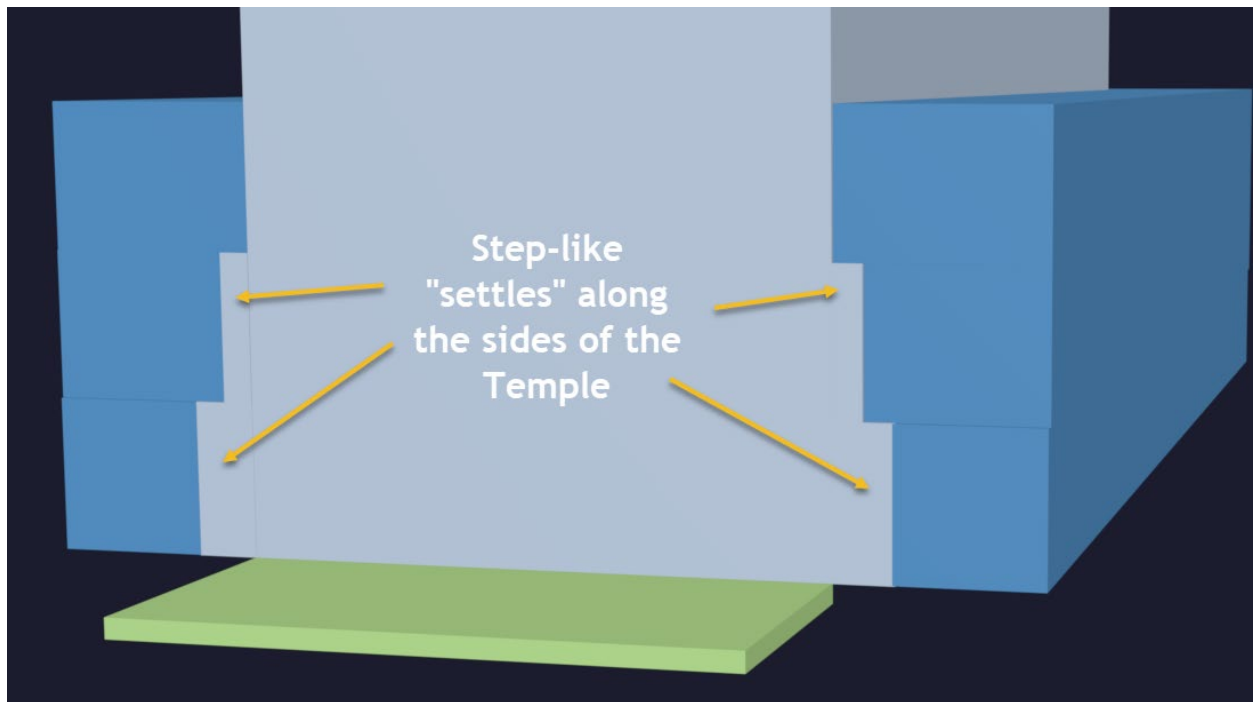
We also see that the Altar has “settles” that form step-like pattern up to the hearth. However, these are not stairs- they are 4 cubits tall. In royal cubit measurement, the rise to each section is over 7 feet high (over 2m). Not only would these “stairs” be too high for a priest to climb, they also couldn’t be used properly for offering or maintenance. The “shelf” extending from the space before each riser is only one royal cubit, meaning there is very little room to maneuver, in addition to too much height to clear. This begs the question- what function do these “settles” serve?

Thankfully, there may be an answer to this. We see a similar pattern on Solomon’s Temple, which has a “U” of three stories of storage rooms surrounding it. 1 Kings 6:5-10 describes this structure:

“<sup>5</sup> Against the walls of the main hall and inner sanctuary he built a structure around the building, in which there were side rooms. <sup>6</sup> The lowest floor was five cubits<sup>[a]</sup> wide, the middle floor six cubits<sup>[b]</sup> and the third floor seven.<sup>[c]</sup> He made offset ledges around the outside of the temple so that nothing would be inserted into the temple walls.

<sup>7</sup> In building the temple, only blocks dressed at the quarry were used, and no hammer, chisel or any other iron tool was heard at the temple site while it was being built.

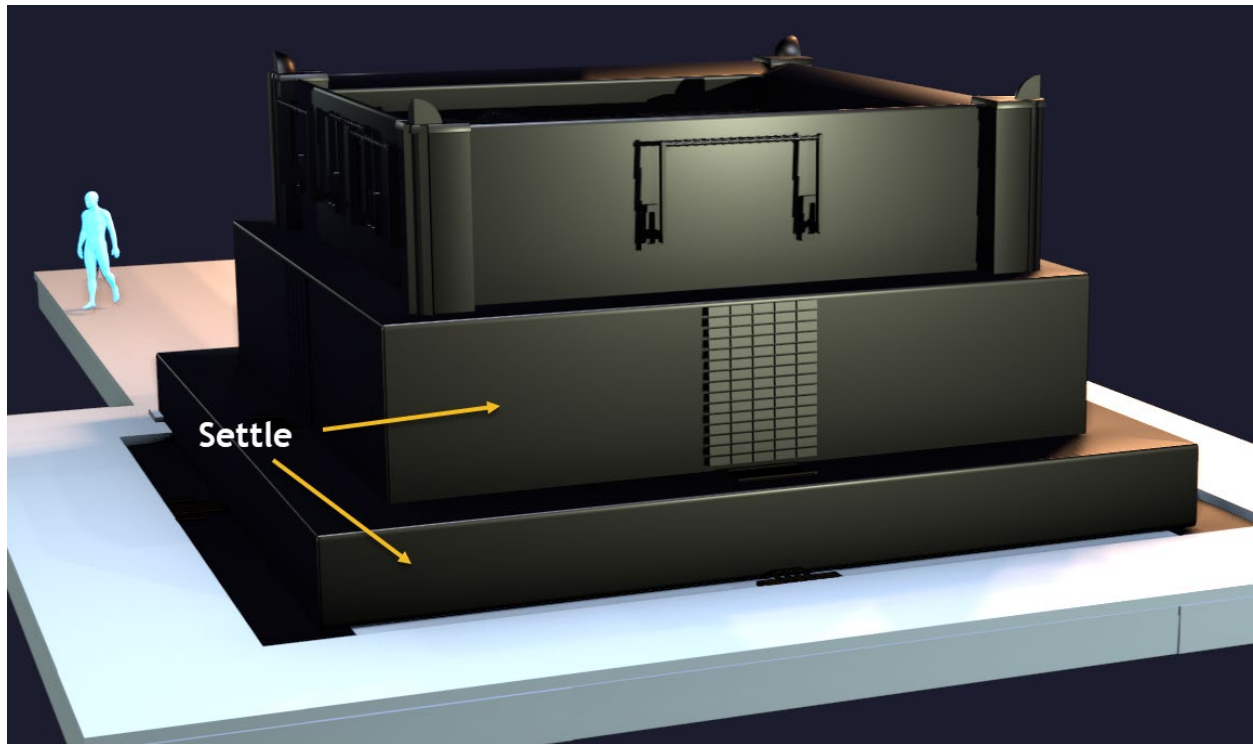
<sup>8</sup> The entrance to the lowest<sup>[b]</sup> floor was on the south side of the temple; a stairway led up to the middle level and from there to the third. <sup>9</sup> So he built the temple and completed it, roofing it with beams and cedar planks. <sup>10</sup> And he built the side rooms all along the temple. The height of each was five cubits, and they were attached to the temple by beams of cedar.”



It appears that “settlements” are perhaps a recurring part of temple architecture. They allow for other annex structures to be built over core elements, while remaining distinct.

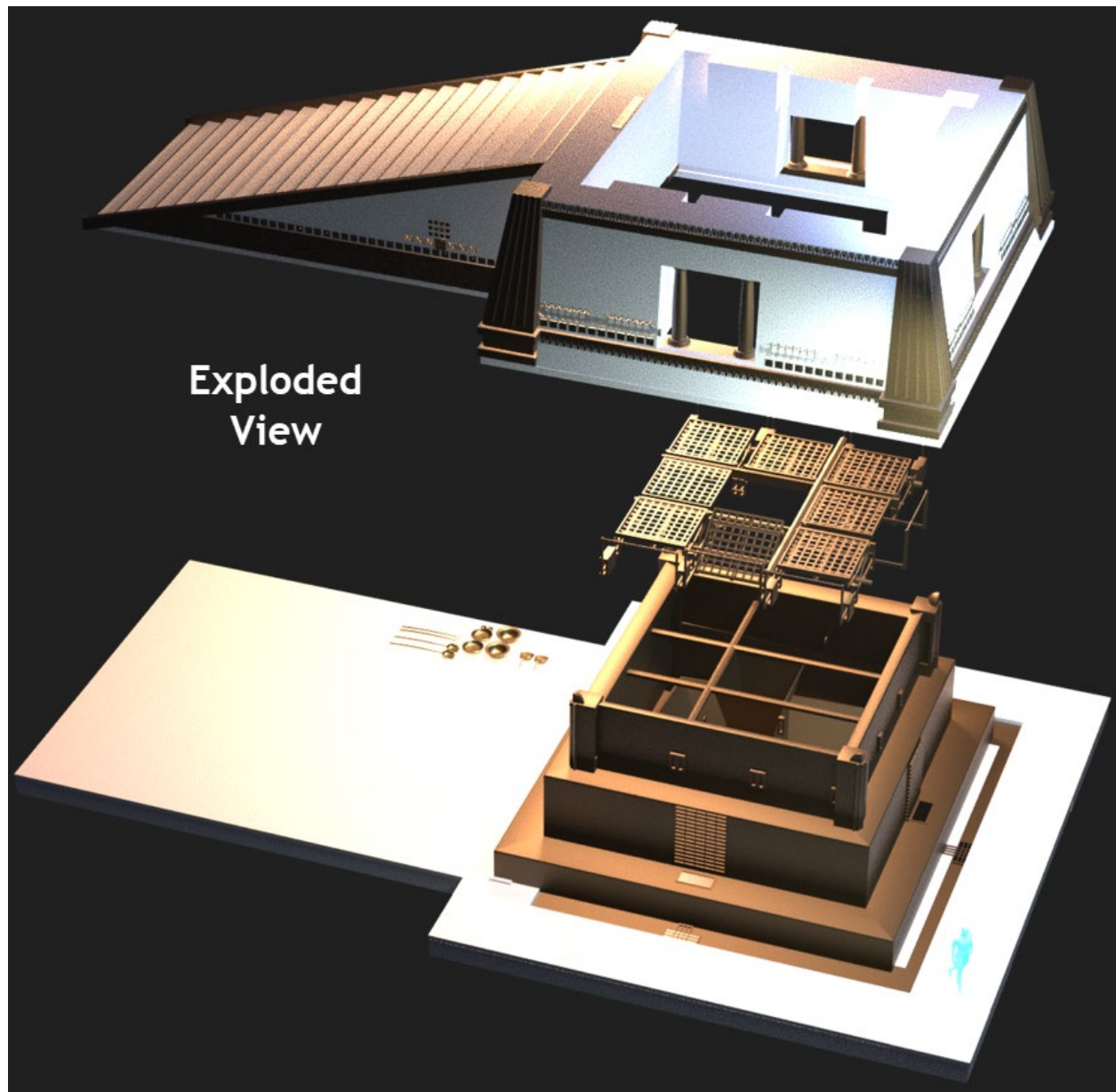
In the case of the Temple of Ezekiel’s Prophecy, the Altar itself appears to be cast, but the indication seems to be that an annex structure that sits on the Altar has yet to be fabricated.

Bringing attention back to the Temple of Solomon, I wonder if the altar wasn’t constructed similarly- the Altar itself was totally bronze, but it was cast with “settlements” so that an annex walkway structure could “cap” it, allowing priests to navigate to the hearth, around it, and back down below. If this is the case, the annex could be different dimensions and materials than those described for the Altar because the annex and the Altar were different structures.



If the pattern was similar to what Ezekiel describes, the hearth would be perhaps a few cubits smaller than the base. If it existed, it is possible that the Altar annex had a slightly pyramid shape- but it could have also been boxy.

I suggest that a pyramidal shape is more likely because I believe sections of the Bronze altar needed to be seen and accessed by the priests, and this might have been easier to do with an incline to the sides of the annex. It might also have been (slightly) safer for any priest that might accidentally stumble around the hearth.

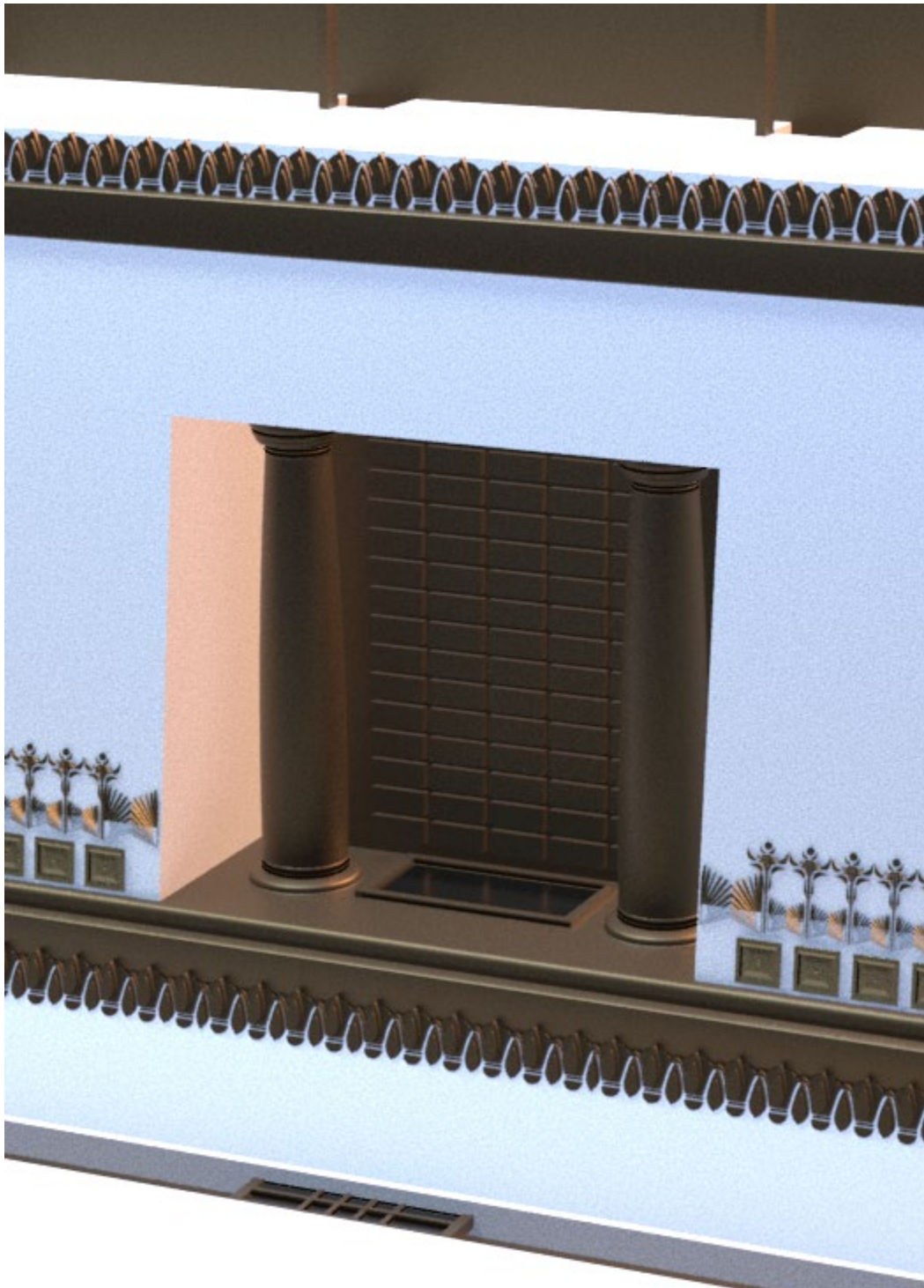


At least one section on each side of the bronze Altar would need to be accessed, because some of the offerings required the blood of offerings to be splashed on the sides of the Altar (Numbers ch 1-6). We also know that the 250 beaten censers of Korah's company were to be visible to the people (Numbers 16: 35-40). My view is that many of these sections would have been lower on the altar for several reasons:

1. Ezekiel describes the Altar he saw with a gutter at the base, indicating that blood used in offerings would probably be lower to the ground.
2. It might be unsafe to have wet blood splashed at the top of the Altar on (potentially) where a stone walkway, 15 feet high could become a dangerous hazard to barefoot priests.



3. The censers of Korah's company would have needed to have been visible to commoners.



One section would probably have been higher near the hearth at the top of the proposed ramp, and would include a drain for blood. This could have also been the case for the other sides of the hearth, but I wonder if that space might have been used for managing wood, ash, and offerings (I'll discuss some

ideas on this proposal later).



Dove offerings also had heads and feathers that would have to be disposed of in a way consistent with the Law, so in addition to a lower gutter around the base to manage blood, there may have also been slots along exposed areas of the Altar to deposit this portion of the offerings.

What material or materials could the proposed annex walkway have been made from? Early on in this project, I was inclined to say that the stone would have been river stones and mortar (Exodus 20:25), or something similar- nothing cut. Herod's Temple apparently used uncut stones from the Valley of Beth Kerem for this reason.

The approach to Solomon's Altar might have been similar, but I'm not sure that it was required at all.

The types of altars made with uncut stone are "proper" altars (the altars made at Sinai prior to the Tabernacle in Exodus 20, or Elijah's altar on Carmel, for example), meaning that sacrifice would have been placed directly on the burning wood. If that altar was stone, it was required that (effectively) God cut the stone.

However, just as the storage annex around the Temple is explicitly NOT the Temple itself, I am not sure why the annex walkway around the Altar should be considered to be part of the "proper" altar. Nothing would be offered on the annex- it is only there as a logistics solution to facilitate offerings on the Bronze Altar. It is not clear to me why (other than traditional thought) such a structure couldn't be made with the same fine stone used for construction of Solomon's Temple.

If so, it's an interesting possibility. The Bible records in 1 Kings 6 "In building the temple, only blocks



dressed at the quarry were used, and no hammer, chisel or any other iron tool was heard at the temple site while it was being built.” This passage is often cited with regard to the “silent” building of the temple, but I wonder if this detail was recorded for another reason entirely. No one viewing the temple construction sees the hands that cut the fine material used. Essentially, the stones arrive at the Temple “cut without hands,” though hands certainly cut the stone.

Perhaps there are some parallels here to Ephesians 2: <sup>19</sup>“Now therefore ye are no more strangers and foreigners, but fellowcitizens with the saints, and of the household of God;

<sup>20</sup>And are built upon the foundation of the apostles and prophets, Jesus Christ himself being the chief corner stone;

<sup>21</sup>In whom all the building fitly framed together groweth unto an holy temple in the Lord:

<sup>22</sup>In whom ye also are builded together for an habitation of God through the Spirit.”

It might be appropriate then that the same stones used in building the temple (which apparently prefigure the saints) would also be used around the Altar of Burnt offering- not a part of the Altar, but built together around it.

Regardless, if this was the case, there would not be any need for Hiram’s fine metalwork since most of the Altar would not be seen under the stone. Even so, it might still have been visually and logistically impressive in other ways.

## **The Hearth**

Another mystery with the Altar is how the hearth worked. It is presumably very large. If dimensions are similar to the hearth discussed in Ezekiel 43, it would be about 9 times larger than the hearth used in the Tabernacle’s Altar of Burnt Offering.

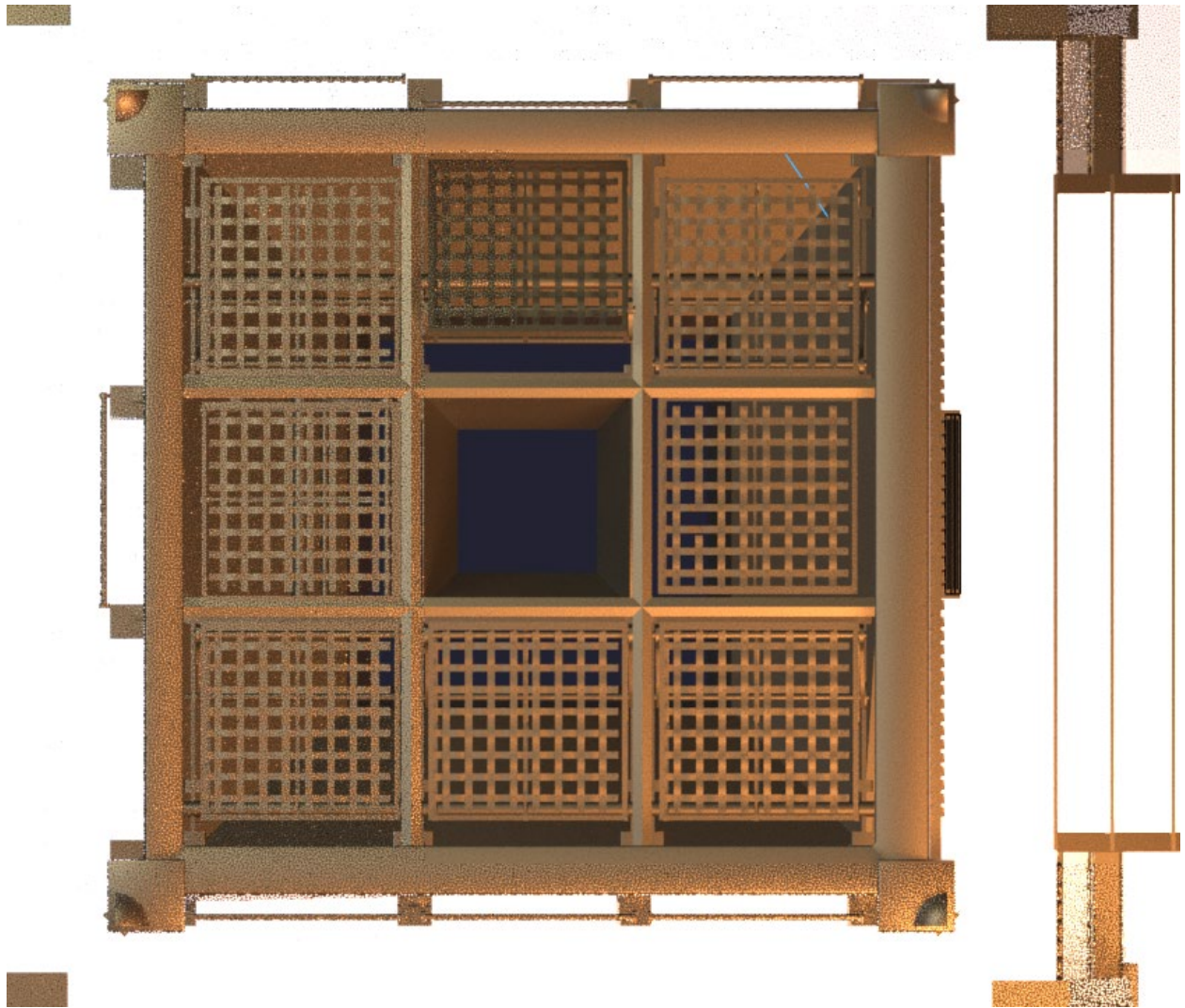
One wonders what sort of function the center of this hearth could serve since it would be almost impossible to reach, and even more difficult to manage.

In addition to receiving a wide variety of offerings, the altar would also need to produce coals for the Altar of Incense in the Temple. The Altar would have to be managed continually, making room for other offerings beyond daily, weekly, monthly, festival and annual sacrifices. The hearth had to be stocked constantly with wood, and ash from everything had to go somewhere where it could be collected and disposed of properly (Leviticus 6:10,11).

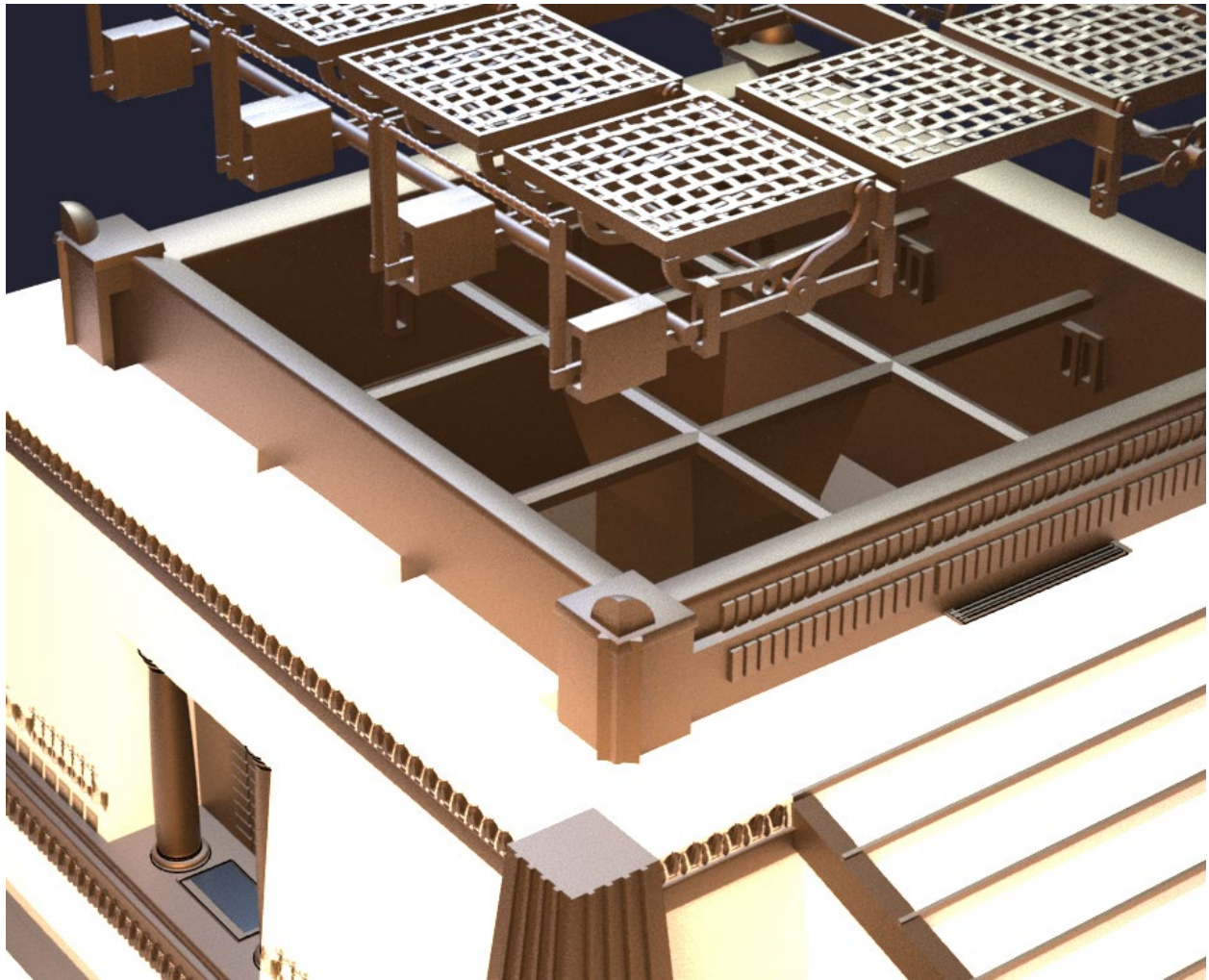
Typically when I see the hearth pictured, it is one giant grate, but as I worked on this project, it occurred to me that this might not be the case. In designing models for the Tabernacle and the Temple, I’ve learned that many of these furnishings may have been modular and even had simple mechanical parts that aren’t discussed. I wondered if that sort of thing might not be possible here?



What if the hearth was broken up into sections, and what if those sections could tilt for better maintenance, or be dragged/ moved over some sort of infrastructure to a new spot and replaced with a section with fresh wood for a new offering (like a sort of manual conveyor system)? What if the center of the hearth was an opening to a central funnel for ash? Then outer sections could be cleaned easily from any direction. There might even be an outer funnel that guides all the ash into a room below where it can be carted off (along with other components of sacrifice from blood, doves, etc).

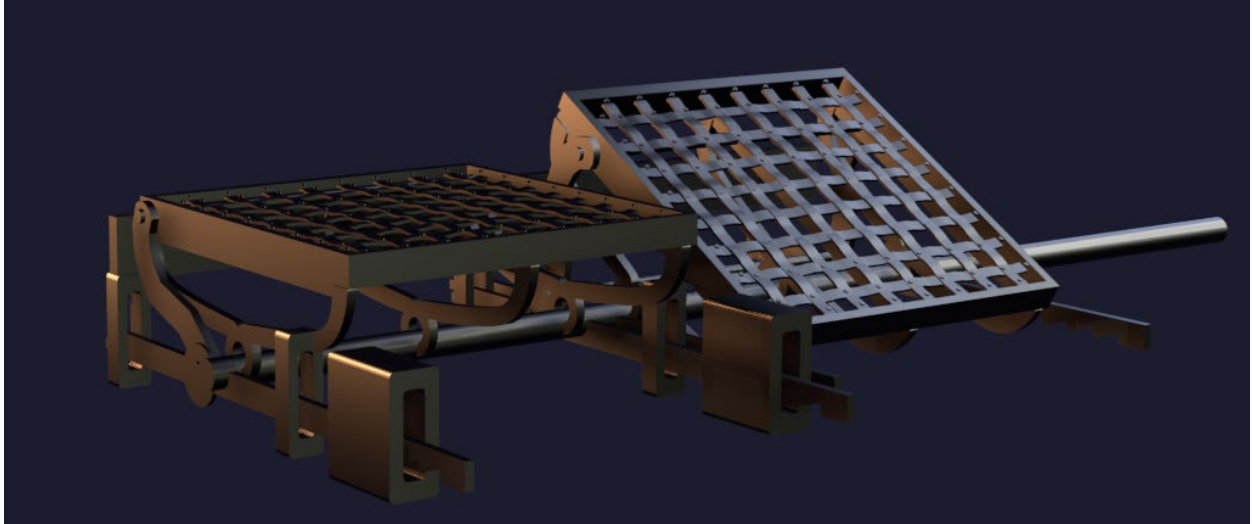






This is all pure guesswork, but it's not hard to see the logistics with a hearth that's broken into sections instead of one large grate.

I got into the weeds on this a little and created a concept for how one or two priests might be able to use a simple push bar lever to angle a hearth grate for cleaning (I referenced the simple mechanics of opening the flue in our chimney). My view was that a grate would need to be attached to the hearth area in some way, since if it fell below, it would be a danger and possibly difficult to recover. An angled hearth grate would allow two options for dealing with unwanted coal or ash- either pushing the ash into the center of the hearth (inner ash funnel), or angling the grate toward the priest who could direct any waste into a larger outer funnel.



Perhaps none of this works and is all just silly, overblown conceptualization on my end. If so, that's OK. There is no passage I can cite to suggest that such functionality existed, nor do I have much real world experience managing outdoor fires. It's just a huge hearth, some of the space seems unusable, and maybe there's more functionality there than is often pictured. If this gets your own curiosity up, then this exercise in ideation over logistical details wasn't for nothing!

### Final Thoughts

There isn't much to go on from the single verse description in 2 Chronicles, but if comparisons to other temple architecture both in Ezekiel 43 and with other aspects of Solomon's Temple (and Herod's Temple) are correct, we can make an educated guess about some of the aesthetics of the Altar of Burnt Offering.

All other visual flourishes that I've added to the exterior (inset metal tiles, etc) are artistic license on my part, and were only added to make the visual interpretation look more visually balanced.

### Production Notes:

All of these illustrations were created over a few days using digital media. Most elements were fabricated in 3D to create a uniform model. Scale man models were sourced from Daz Studio to save on production time. Objects were rendered in 3D, then painted over in Photoshop.