

KSC vehicle assembly building -Artemis



Some modifications to the VAB for the newer spacecrafts includes:

A new platform system to allow access to the Orion spacecraft and SLS vehicles.

NASA announced that in 2013, the previously used platforms in High Bay 3 were removed. The new system, which has 10 platform levels, will be able "to move in and out, and translate up and down as needed," according to NASA. For the first time in the VAB's history, the building will be able to accommodate and service different vehicle configurations without major construction efforts.

Low-voltage power sources are being upgraded, starting in High Bay 3.

State-of-the-art fiber optic cabling is replacing copper wiring and lead-shielded cabling from the Apollo and Shuttle programs. In addition, water, sewage, and drainage piping will be upgraded, along with the building's fire protection system.

All four of the vertical-lift doors have been repaired and upgraded..

The agency also stated: "In the F tower, a second elevator will be added. Old or unnecessary ground support equipment has been removed, including large beams in High Bay 1, where the Apollo/Saturn V was stacked, and a 125-ton bridge crane in High Bay 4 that has not been used in 20 years."

As the building has aged, naturally some corrosion from the elements can be expected. Any affected areas will undergo repairs and revitalization.

The Vehicle Assembly Building, or VAB, is a national landmark that remains a central element in NASA's plans to launch people and equipment deep into space on missions of exploration, including the agency's Journey to Mars. Built at NASA's Kennedy Space Center in Florida, it remains the only facility where assembly of a rocket occurred that carried humans beyond low-Earth orbit and on to the Moon. For 30 years, it also served as the final assembly point for space shuttles to external fuel tanks and solid rocket boosters.

The iconic facility will serve as the central hub of NASA's premier multi-user spaceport, capable of hosting several different kinds of rockets and spacecraft at the same time. Whether the rockets and spacecraft are going into Earth orbit or being sent into deep space, the VAB will have the infrastructure to prepare them correctly for their missions.

The VAB was constructed for the assembly of the Apollo/Saturn V moon rocket, the largest rocket made by humans at the time. The building is located 3.5 miles from Launch Pad 39A and 4.2 miles from Launch Pad 39B. A pair of crawler-transporters, some of the largest machines ever to move on land, were used to carry the completed rockets to the pad.

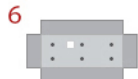
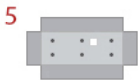
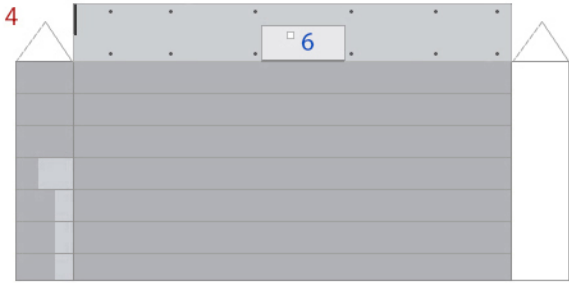
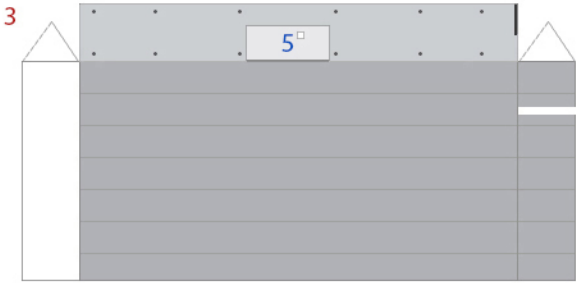
One of the largest buildings in the world by area, the VAB covers eight acres, is 525 feet tall and 518 feet wide (The VAB is the largest single-story building in the world - 10 stories tall). It is made up of 65,000 cubic yards of concrete and its frame is constructed from 98,590 tons of steel. It stands atop a support base of 4,225 steel pilings driven 164 feet into bedrock. The building also is home to the largest American flag, a 209-foot-tall, 110-foot-wide star spangled banner painted on its south side. Each of the stars on the flag is 6 feet (1.83 m) across. A 12,300-square-foot NASA logo also adorns the south side of the massive facility.

The tallest portion of the VAB is called the high bay. There are four high bays, two on the east side, and two on the west side of the building. Each has a 456-foot-high door. The doors are the largest in the world and take about 45 minutes to open or close completely.

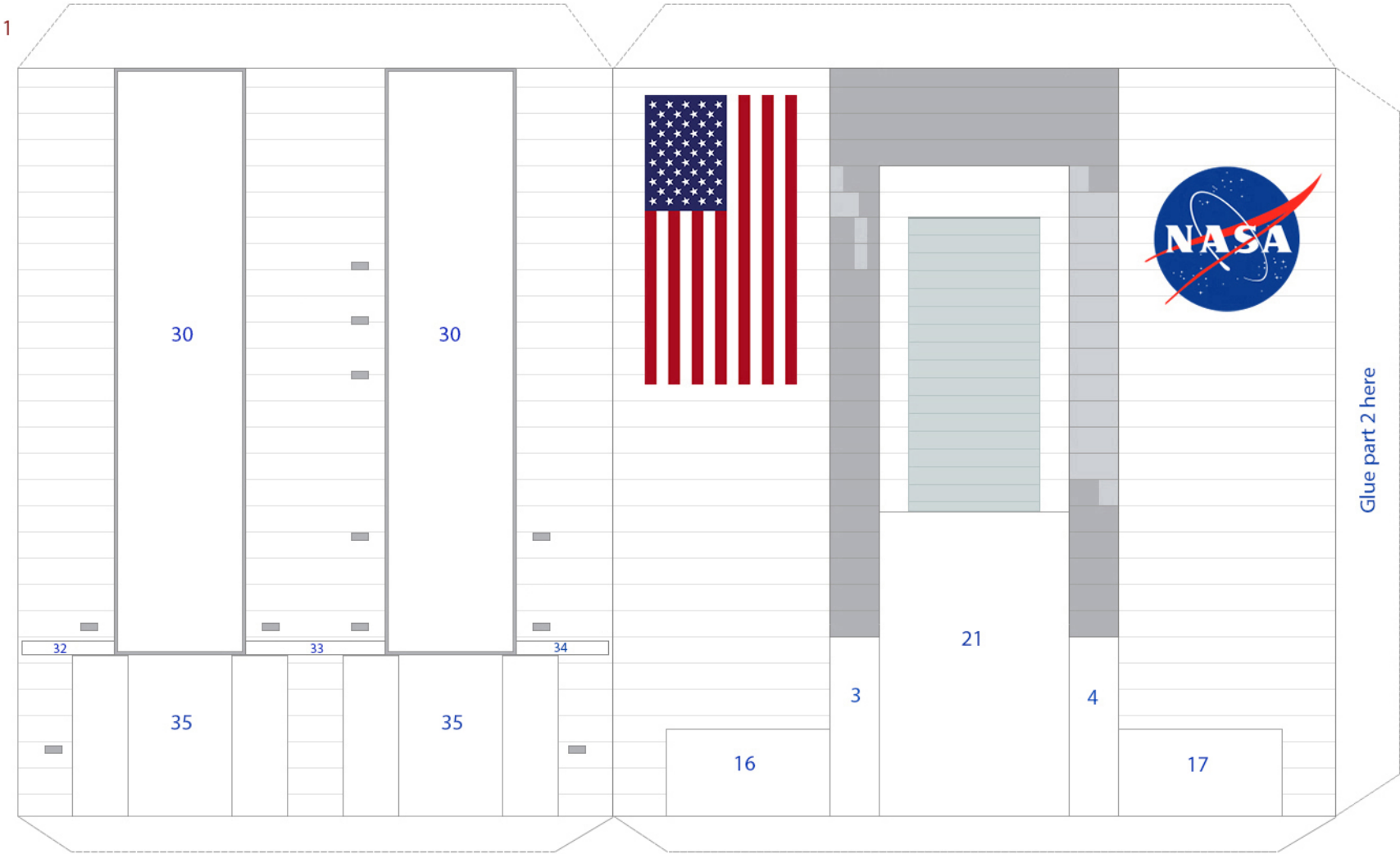
Because the SLS rockets will be larger (and, ultimately, more powerful) than the Saturn V's of the 1960s and 1970s, NASA Kennedy's Ground Systems Development and Operations (GSDO) Program has been hard at work getting the VAB ship-shape (or "spaceship-shape") to process the new launch vehicles.



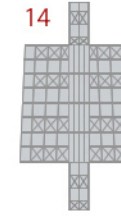
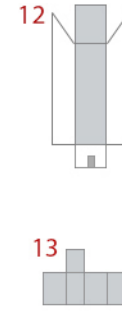
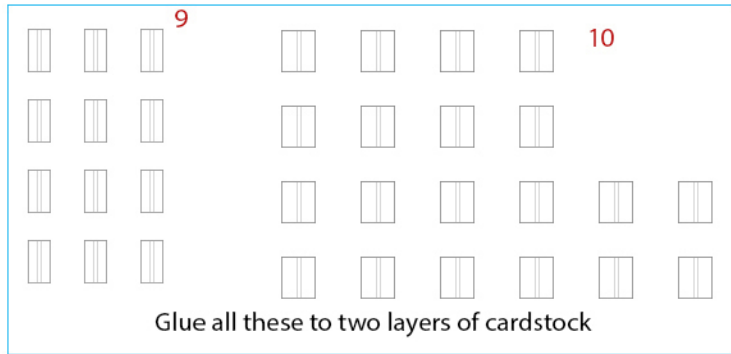
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7
Color back the
same color



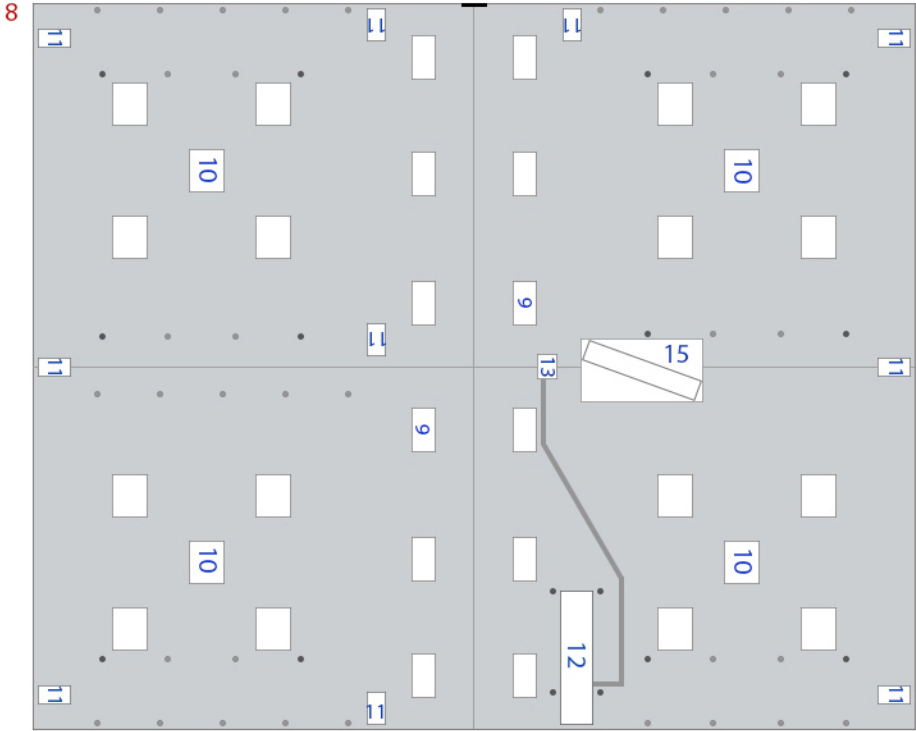
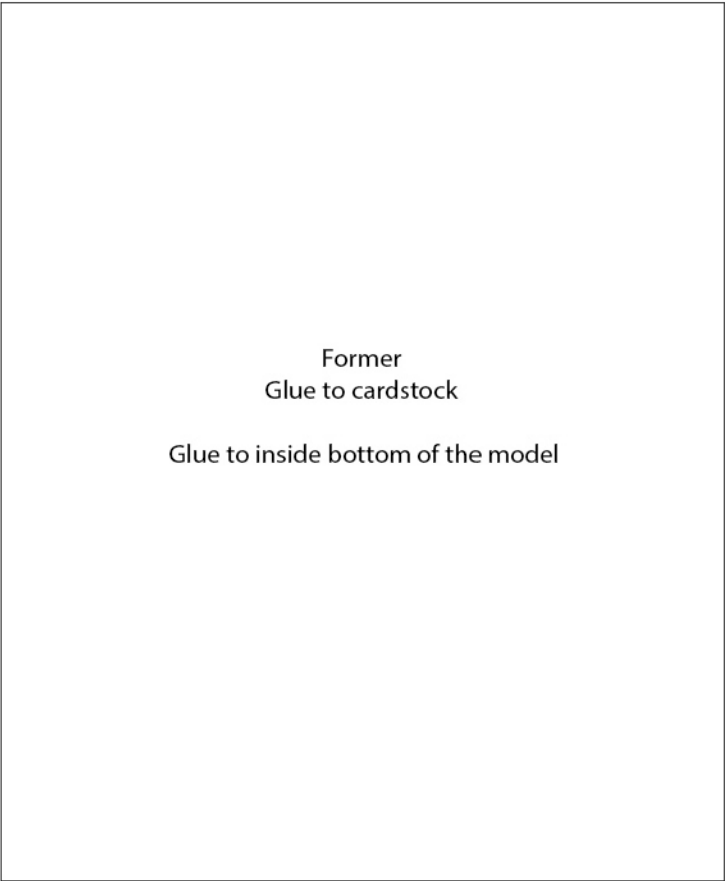
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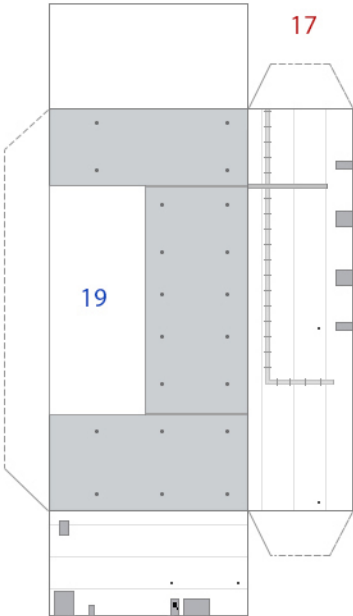
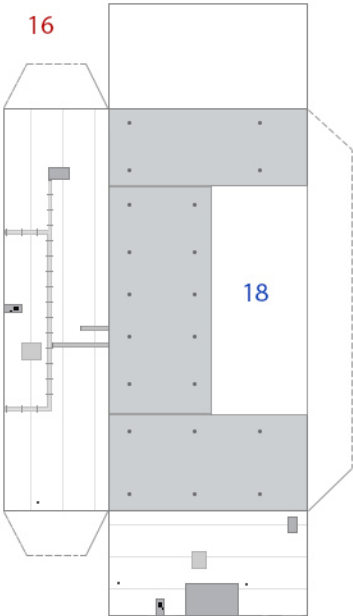
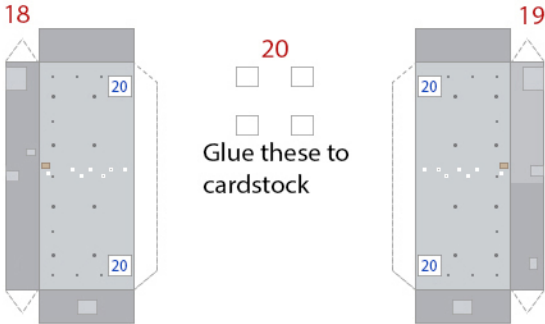
Need 12 plastic broom straws or similar material cut at the same length as the BLACK line below.
Need 4 plastic broom straws or similar material cut at the same length as the RED line below.
All colored light grey or silver.



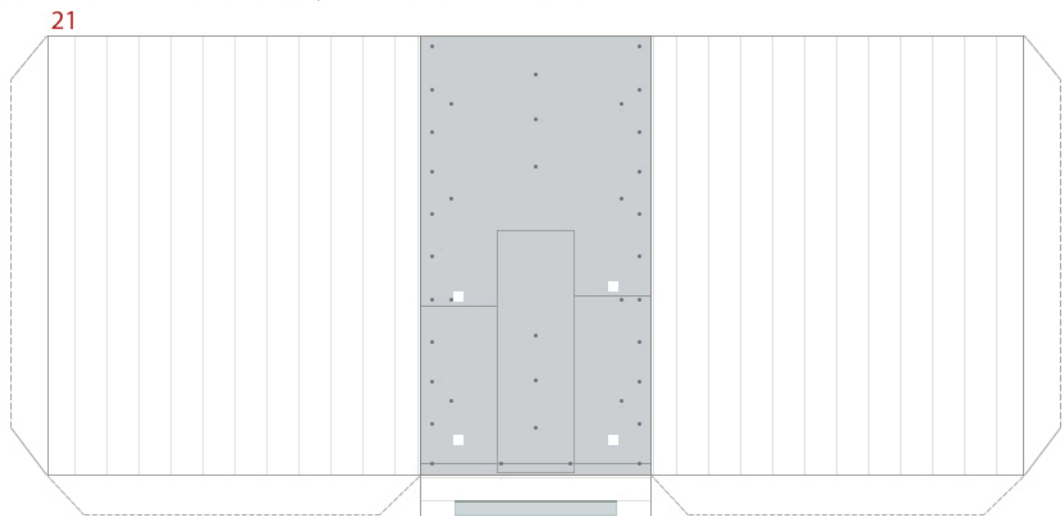
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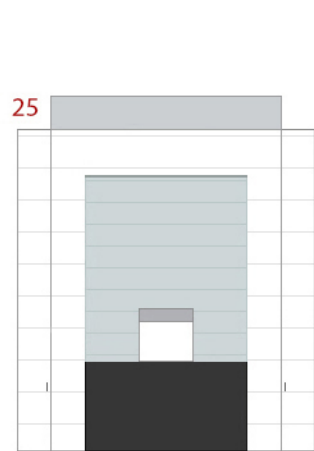
Poke small pin holes on the 16 black dots to help hold the antennas in place.



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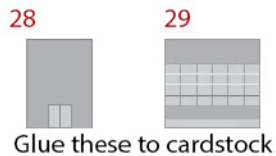


22
Glue to two layers of cardstock,
color edges the same color

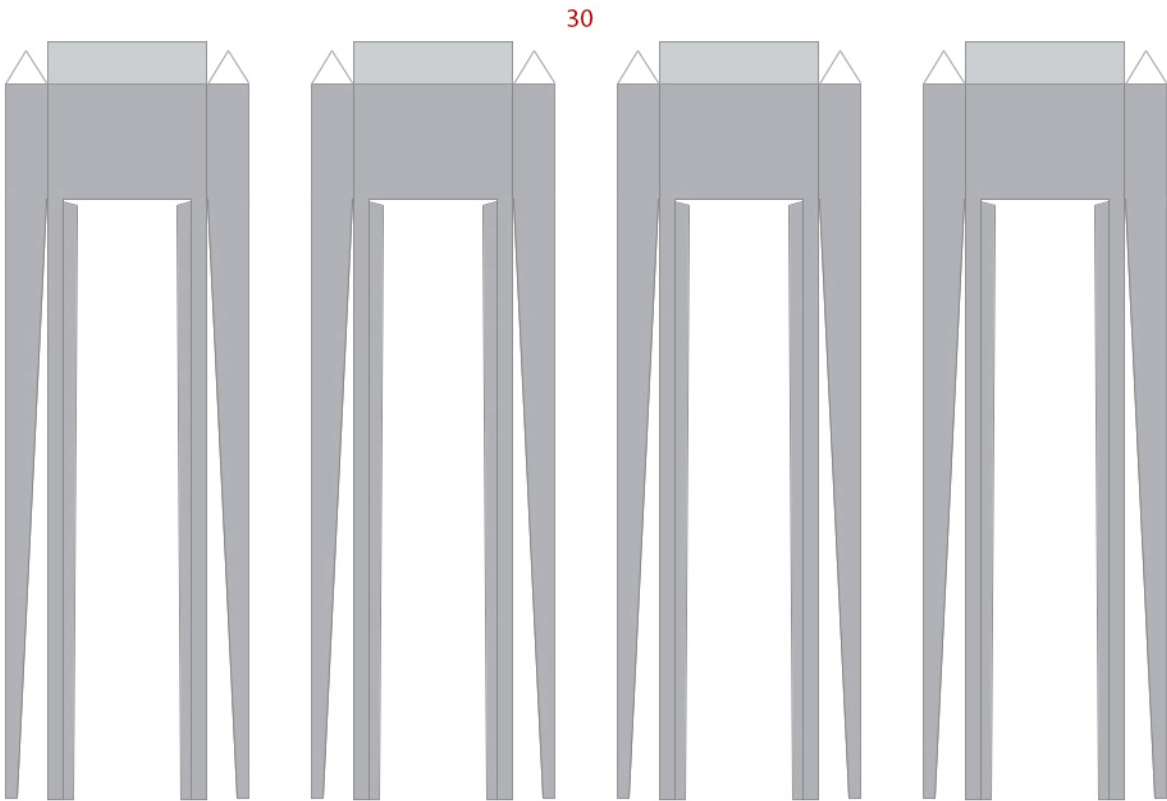


26
Glue to two layers of
cardstock, color back and
edges the same color.

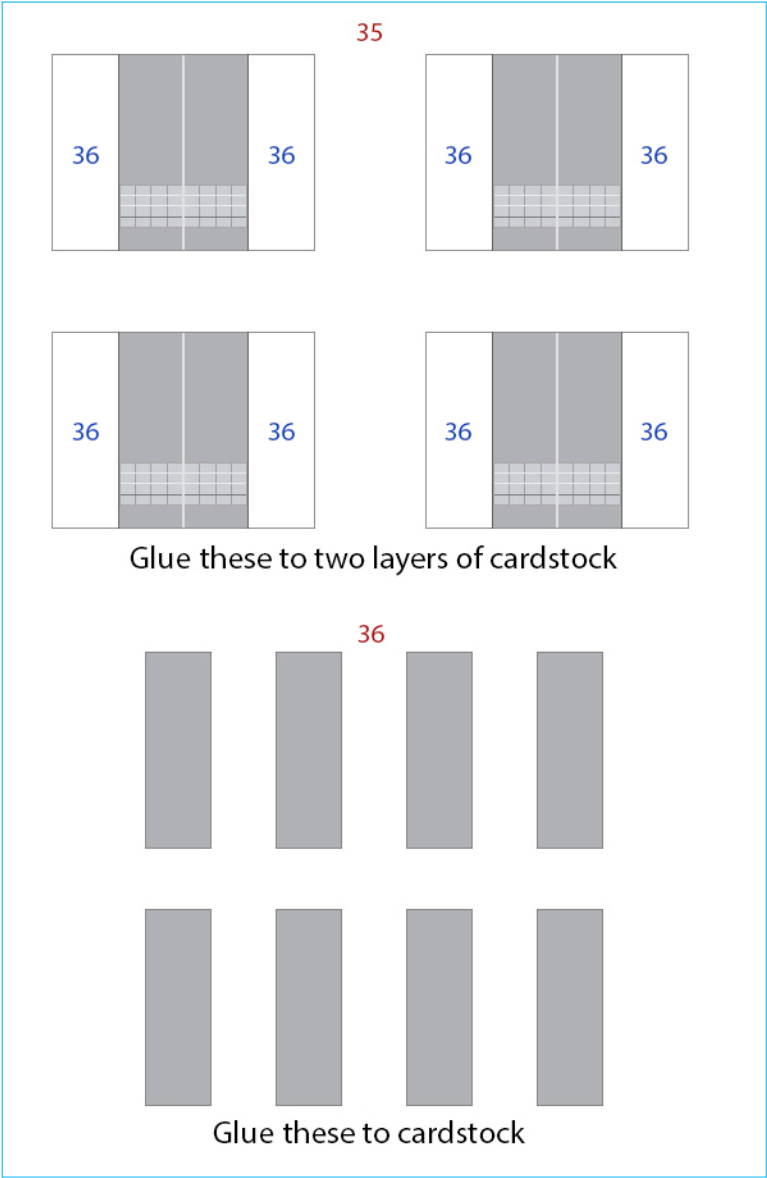
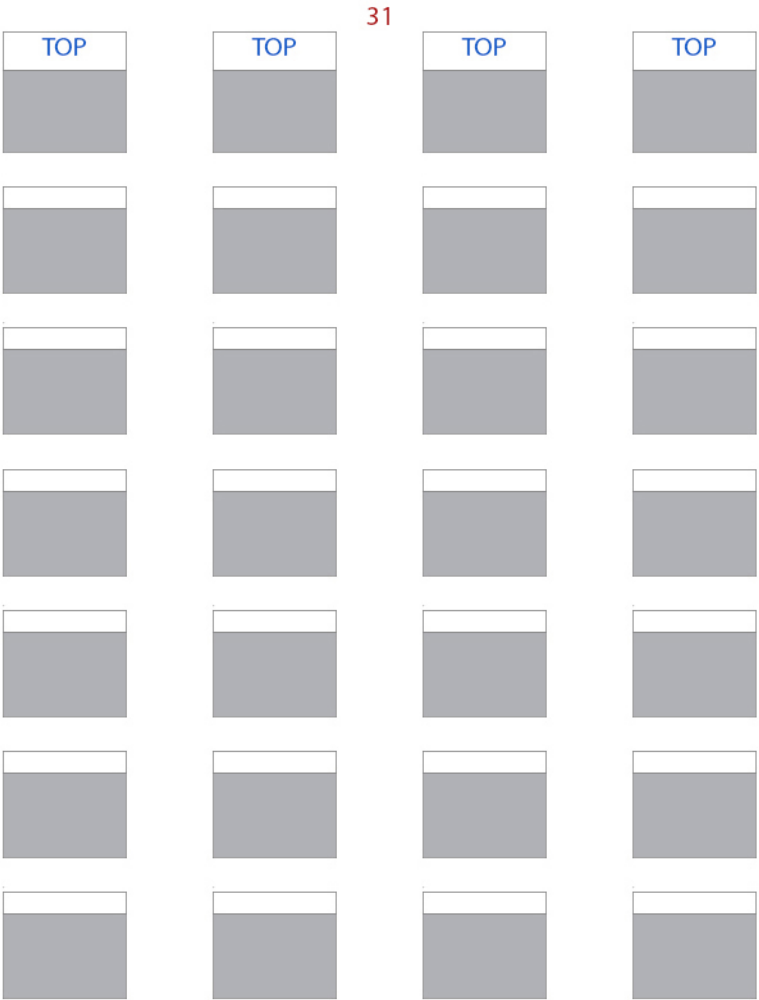
27 27a
Glue to cardstock, color
back the same color
X1 X2



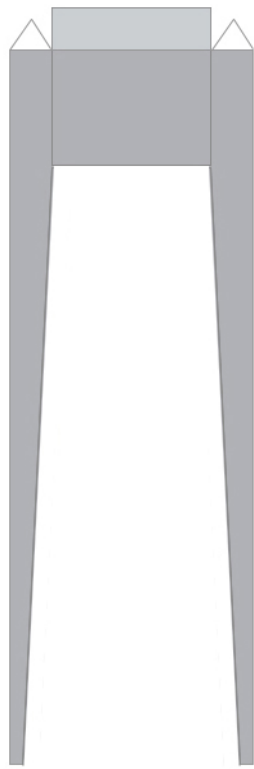
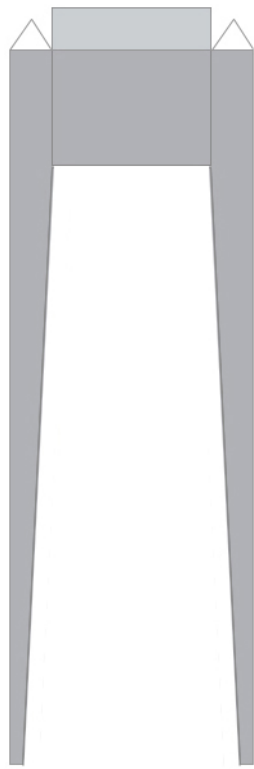
Glue these to cardstock



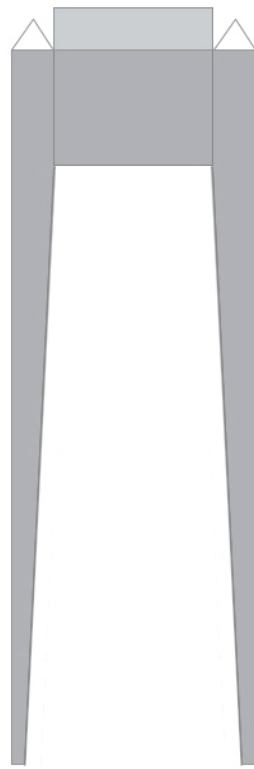
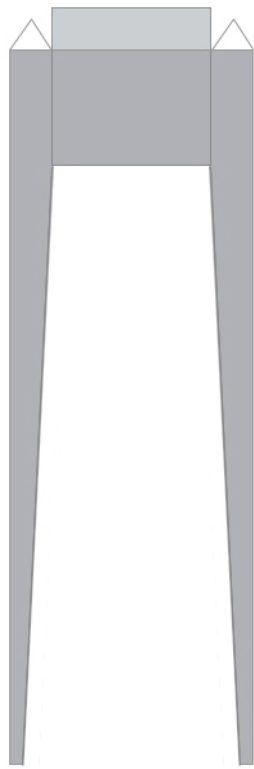
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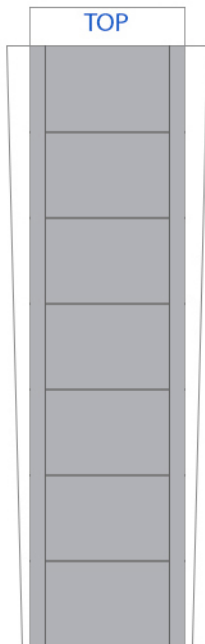
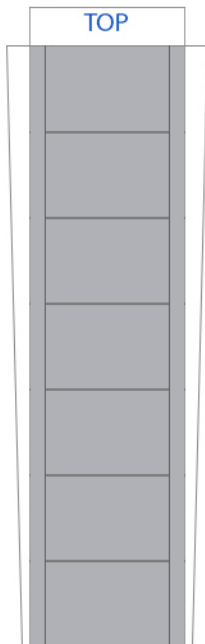
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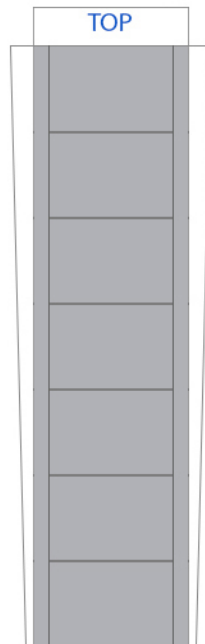
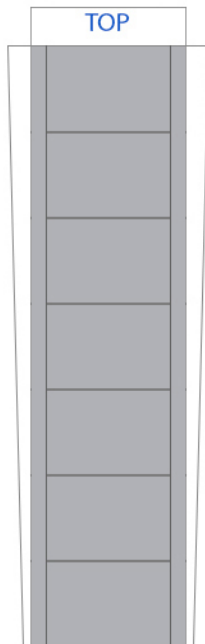
30



Optional
High Bay Doors - Easy version



31



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Glue to thick cardboard or foamboard

