

DEPARTMENT – BUILDING EXHIBITS

SECTION – STEM ARCHITECTURAL BLOCK CONSTRUCTION

(New in 2021)

(Must be enrolled in STEM, Architectural Block Construction Project)

Description: The STEM ABC exhibit area is a new STEM project for 2021. The project is starting with an emphasis on using architectural blocks (“Legos”) to construct dioramas. This project allows youth to explore architectural design in a three dimensional space. The intent is for this program start with foundational ideas of architecture, some of which youth may already have, and allow youth to continue to build on this knowledge becoming more and more experienced.

1. 4-H members must be currently enrolled in the Kansas 4-H STEM –Architectural Block Construction project to exhibit in this division.
2. Each exhibitor may enter one exhibit. Exhibits must have been constructed during the current 4-H year
3. Total exhibit dimensions may not exceed 2 feet high, by 2 feet wide, by 2 feet deep.
4. All components used in construction should be dust free, clean, free of chips, scuffs, or cracks
5. The primary building component should be interlocking blocks, commonly referred to by the brand name of Lego®
6. Other components can be integrated into dioramas to illustrate architectural aspects that may be difficult to convey with traditional interlocking blocks, for example marbles for small, round objects.
7. The use of existing “store bought” sets for major architectural elements of the display is not allowed, use of figurines from sets is allowed as are using individual bricks to create something different than the architectural component of the set it came from. “Store bought” sets should be considered an arts and crafts entry. The intent of this is to ensure fairness among exhibitors and encourage maximum creativity instead of just following a set of plans.
8. Displays must have significant architectural components (walls, windows, doors, roofs, canopies flying buttresses, etc.), landscapes are discouraged.
9. The design should have a central theme, for example a garage, a house, a shop, this theme should be discussed in the video, this can link back to architectural elements in the display, for example: toilets, chairs, sofas, plants, pianos, cars, garage doors, spaceships, animals, food, etc. (architectural elements, components, and features can be thought of as nouns)
10. Architectural elements should have a consistent look, walls with no pattern or consistency will be deducted one ribbon placing.
11. Gaps or cracks should not be visible between assembled blocks.
12. Doors should open and close, windows can be either fixed or open and close.
13. Vehicles that are intended to stay in a single place should be affixed to base plates with sticky tack, hot glue, or other method.
14. You can use a partial wall or no wall, called a reveal. Reveals that show the inside of a structure are acceptable, such as only having three walls to allow an unobstructed view into a room.
15. Mechanical enhancements or motion elements that add motion to the diorama are acceptable and encouraged. If used judges should be able to use them and instructions should be provided for operation.

16. Artistic designs with no architectural design/components are not permitted and two ribbon placings will be deducted.
17. The exhibitor's name(s) and club must be tagged or labeled in a prominent location on the display.
18. Each exhibit must include an Architectural Block Construction information packet. Entry of just a packet without an accompanying exhibit is not a sufficient exhibit.
19. Each exhibitor is required to complete the "4-H STEM Architectural Block Construction Exhibit Information Form" which is available through your local K-State Research and Extension office or at www.STEM4KS.com. This form must be attached to the outside of a 10" x 13" manila envelope. Do not tie the envelope to the exhibit.
20. Each exhibit information packet should include the following items: a. At least one drawing of the desired architecture on graph paper, multiple views (top, front, side) are preferred. Plans encourage organizing the build process so that elements don't get forgotten. For example, a real house doesn't get built without plans. Pages b.1 to 5 of photos showing work on the exhibit, preferably from a beginning state to final or completed state. If appropriate operating instructions for mechanical portions of the diorama.

Introductory -Level 1 classes (about 1 -3 years of experience)

5710 Diorama illustrating at least 2 architectural features beyond floors, ceilings, and walls

Experienced –Level 2 classes (about 4 -6 years of experience)

5711 Diorama illustrating at least 4 architectural features beyond floors, ceilings, and walls, and includes 1 or more motion elements

Advanced –Level 3 classes (about 7 -9 years of experience)

5712 Diorama illustrating at least 6 architectural features beyond floors, ceilings, and walls, and includes 2 or more motion elements

Master –Level 4 classes (10 or more years of experience)

5713 Diorama illustrating at least 8 architectural features beyond floors, ceilings, and walls, and includes 3 or more motion elements