

Layout Instruments Contest

Purpose

To evaluate each contestant's ability to set up an automatic level, establish instrument height from an established benchmark (which is 4' 0" above finished floor), determine the height of an object above finished floor, and establish the height at the top of a door or window frame.

Eligibility

The apprentice competing at the District Council level must be an apprentice during the year he or she is competing to go onto the International Competition. The apprentice may come from any year apprenticeship. He or she may only compete at the International level once.

Clothing Requirement

Contestants must wear long pants, shirt with sleeves, work boots (no tennis shoes), hard hat.

Equipment and Materials

The following equipment will be provided by the contest committee:

- Automatic levels
- Tripods
- 6' stick rule or metal tape
- Note paper
- Pencils
- 3 books or similar objects
- Safety glasses with side shields (optional)
- Hard hats

The contestant may provide the following:

- Safety glasses with side shields (optional)
- Hard hat

Contest Guidelines

These guidelines will be followed during this contest:

1. Contestants will be randomly selected to determine the order in which they will demonstrate their ability to use layout instruments.
2. Contestants must wear their hard hat and safety glasses at all times when using the instruments.
3. Each contestant will be required to set up the automatic level.

4. Each contestant will correctly perform the following five tasks:
 - Correctly set up and level an automatic level.
 - Establish the automatic level's height (AFF). The judges will establish a 4' 0" above finished floor (AFF) mark the day of the competition.
 - Have 3 books of different thickness on a table. From automatic level height, give the judges the height of one of the books (AFF).
 - Establish the height (AFF) at top of a door or window frame using the automatic level.
 - All elevation are to be +/- 1/16"
5. The contestant must demonstrate correct safety practices at all times. The contest judges may stop a competitor at any time if they deem the contestant's manner to be hazardous to either themselves or others. Such stoppage will disqualify the contestant from that section of the contest. If the contestant is warned a second time, he or she will be disqualified as a contest participant.
6. While the contest is in progress, there shall be no communication between the contestants or between the contestants and anyone else except as directed by a judge or contest official.

Contest Scorecard

This contest will be scored as follows:

1. The Layout Instruments contest is worth ten (10) points.
2. Contestants will be given 30 minutes to perform the required tasks.
3. Contestants will earn points as follows:
 - 2 points for the correct set-up of the automatic level
 - 2 points for establishing automatic level height (AFF)
 - 3 points for determining the height of an object (book) from the finished floor with the automatic level
 - 3 points for using the automatic level to establish the height at the top of a door or window frame
4. Contest judges should use the scoring sheet on the following page to record each contestant's times and then determine the points earned by each contestant.
5. These results will be submitted to the contest officials responsible for compiling the overall competition results.

Layout Instruments Contest Scoring Sheet

Contest Location: _____ Date: _____

Judges: _____

Contestant Number	Set Up Level Points	Instrument Height Points	Book Height Points	Door & Window Points	Total Points

Contestant Number	Set Up Level Points	Instrument Height Points	Book Height Points	Door & Window Points	Total Points