

SCIENCE OLYMPIAD

CATCH IT!

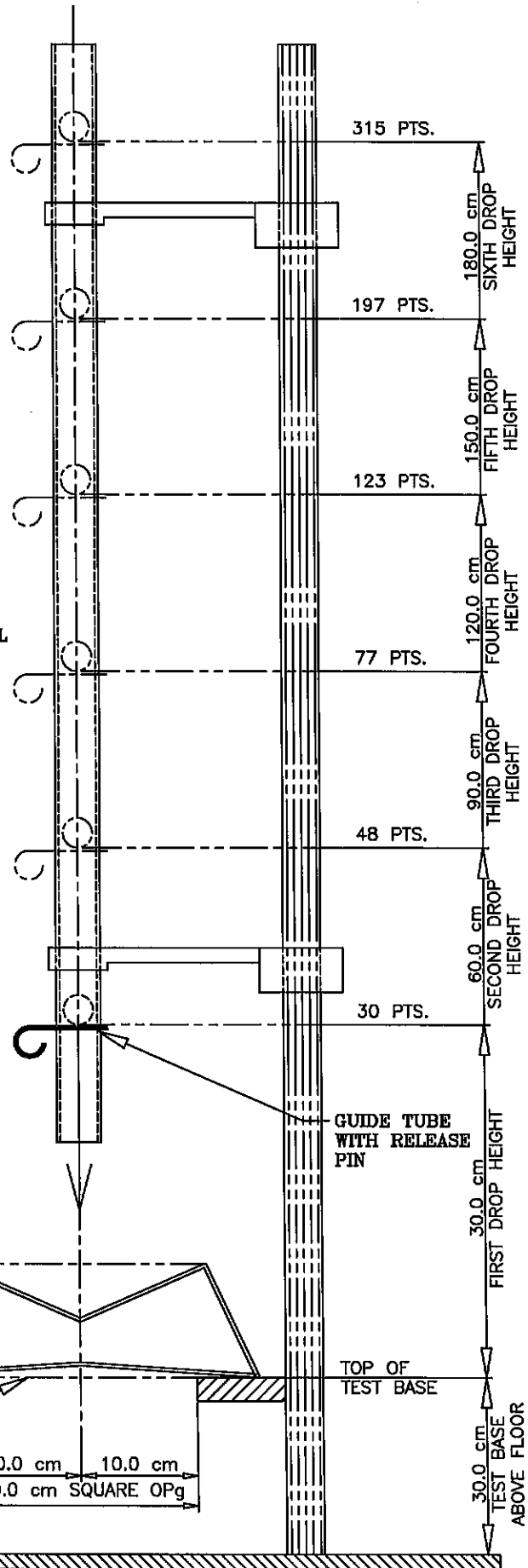
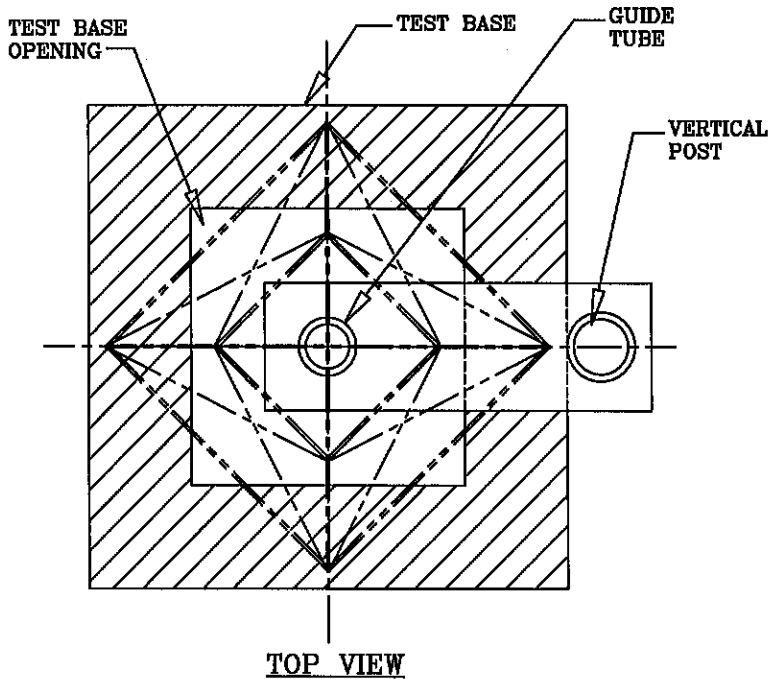
Robert Monetza
2012 Draft Rules

DROP LEVELS MUST BE TAKEN IN ORDER FROM LOWEST TO HIGHEST AND NO LEVEL MAY BE SKIPPED. THE STEEL BALL SHALL BE DROPPED AT LEAST ONCE AT EACH LEVEL, UNTIL THE STRUCTURE FAILS OR UNTIL IT CATCHES THE BALL. A MAXIMUM OF 12 ATTEMPTS ARE ALLOWED INCLUDING ALL DROP LEVELS

STRUCTURES WILL BE RANKED BY HIGHEST EFFICIENCY DETERMINED AS FOLLOWS:

$$\text{EFFICIENCY} = \frac{(\text{SUM OF DROP POINTS} * \text{MASS OF BALL})}{(\text{STRUCTURE HEIGHT} * \text{STRUCTURE MASS})}$$

TIES SHALL BE BROKEN FAVORING LOWER STRUCTURE MASS, AND THEN LOWER STRUCTURE HEIGHT.

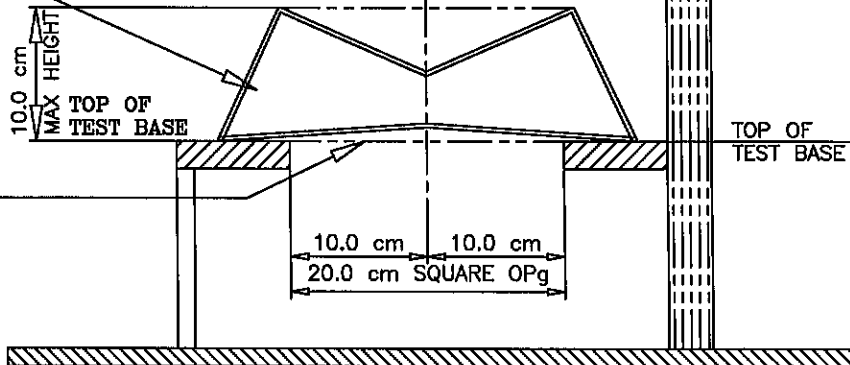


NOTE: STRUCTURE SHAPE SHOWN FOR ILLUSTRATION ONLY

STRUCTURE MAY BE REPOSITIONED ON THE TEST BASE AFTER EACH DROP, BUT NO REPAIRS MAY BE MADE.

NO PART OF THE STRUCTURE MAY EXTEND BELOW THE TOP OF THE TEST SUPPORTS BEFORE ANY IMPACT

BROKEN PIECES OF STRUCTURE WHICH STICK INTO THE OPENING MUST BE REMOVED BEFORE THE NEXT ATTEMPT. NO OTHER ALTERATION IS ALLOWED.



SIDE VIEW