|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DOTLOGO2 | | | | | | | **Calibration of Concrete Test Equipment**  **Capping Cylindrical Strength Specimens** | | | | | | | |
|  | | | | | | | | | | | | | | |
| Owner of Equipment: | | |  | | | | Manufactured By: | | |  | | | | |
|  | | | | | | | | | | | | | | |
| Model No.: | |  | | | Serial No.: |  | | | IDOT No.: | | |  | | |
|  | | | | | | | | | | | | | | |
| Inspection References: (check one) | | | | Illinois Modified AASHTO T 231 | | | | | ASTM C 617A | | | | | |
|  | | | | | | | | | | | | | | |
| Frequency: | | a. Every 3 months during use, or  b. When there is a question of calibration. | | | | | | | | | | | | |
|  | | | | | | | CalibrationsB | | | | | | | |
|  | | | | | | | # 1 | # 2 | # 3 | | # 4 | | # 5 | # 6 |
| Record date of inspection. (mm/dd/yy) | | | | | | |  |  |  | |  | |  |  |
| Indicate date of next inspection. (mm/dd/yy) | | | | | | |  |  |  | |  | |  |  |
| Record capping plate thickness.  (glass ≥ 1/4 in. (6 mm); metal ≥ 0.45 in. (11 mm); granite ≥ 3 in. (75 mm)) | | | | | | |  |  |  | |  | |  |  |
| Record capping plate side dimension. (≥ 1 in. (25 mm) larger than specimen’s diameter) | | | | | | |  |  |  | |  | |  |  |
| Is metal capping plate surface plane? (within 0.002 in. in 6 in. (0.05 mm in 150 mm) or 0.001 in. in 4 in.  (0.03 mm in 100 mm)) | | | | | | |  |  |  | |  | |  |  |
| Is metal capping plate surface free of gouges, grooves, and indentations > 0.010 in. (25 mm) deep? (Y/N) | | | | | | |  |  |  | |  | |  |  |
| Is metal capping plate surface free of gouges, grooves, and indentations > 0.05 in.2 (32 mm2) in area? (Y/N) | | | | | | |  |  |  | |  | |  |  |
| If recess, record metal plate thickness beneath recess.  (≥ 1/2 in. (13 mm)) | | | | | | |  |  |  | |  | |  |  |
| If recess, record depth of metal plate recess.  (≤ 1/2 in. (13 mm)) | | | | | | |  |  |  | |  | |  |  |
| Does alignment device ensure that no single cap will depart from perpendicularity of cylindrical specimen by more than 1/8 in. in 12 in. (3.2 mm in 305 mm) or 0.07 in. in 8 in. (1.7 mm in 200 mm)? (Y/N) | | | | | | |  |  |  | |  | |  |  |
| Can the sulfur mortar be heated between  265° to 290°F (129° to 143° C)? (Y/N) | | | | | | |  |  |  | |  | |  |  |
| Is capping material strength adequate for cylinder strength?C (Y/N) | | | | | | |  |  |  | |  | |  |  |
|  | | | | | | | | | | | | | | |
| Name of Inspector/Comments: (For BMPR\*: Supervisor shall initial each calibration following completion.) | | | | | | | | | | | | | | |
| # 1 |  | | | | | | | | | | | | | |
| # 2 |  | | | | | | | | | | | | | |
| # 3 |  | | | | | | | | | | | | | |
| # 4 |  | | | | | | | | | | | | | |
| # 5 |  | | | | | | | | | | | | | |
| # 6 |  | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| \*BMPR: IDOT Bureau of Materials and Physical Research | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| A Only applies to laboratories inspected by the Cement and Concrete Reference Laboratory (CCRL).  B A “No” answer or measured value outside of indicated tolerances requires the equipment to be repaired or replaced. For any discrepancy, the applicable inspection reference(s) indicated above shall have precedence over this calibration form.  C Refer to Illinois Modified AASHTO T 231 or ASTM C 617 according to the reference checked above. | | | | | | | | | | | | | | |