
5 Setting Forms

Form Fitness

Base Support

Form Setting

Grade and Alignment

CHAPTER FIVE: SETTING FORMS

Since the quality and placement of the forms directly affects the quality of the pavement, the importance of base support, alignment, and general fitness of the forms is essential. Close attention should be paid to the variation tolerances of the forms and the methods of securing the forms to the grade.

FORM FITNESS

When paving is done with a finishing machine, setting the forms is a critical operation. As the forming process begins, each pavement form is examined. These forms have often been used for several years and may be in poor condition. The top edge of the forms represents the top surface of the pavement. If the form has a dip, the pavement may have a dip as well. Any form that varies by more than 1/8 in. in 10 ft along the top edge of the form or 1/4 in. in 10 ft along the face is not used (Figure 5-1).

Also, forms that are no longer capable of being securely pinned and locked are not used. If the Contractor elects to repair rejected forms, they are required to be re-inspected before use.

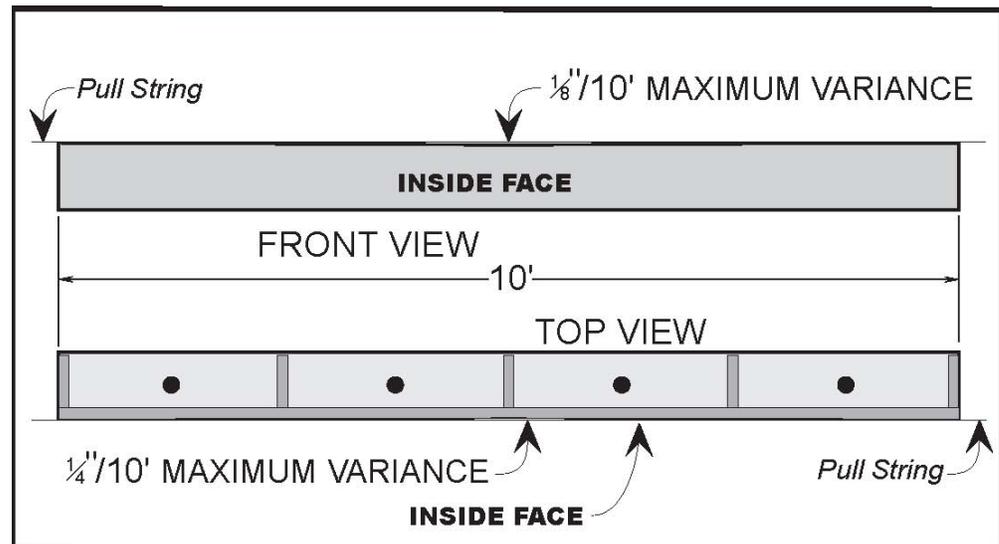


Figure 5-1. Form Allowable Variance

BASE SUPPORT

The foundation under the forms is required to be firm, placed to grade, and make 100 % contact with the bottom of the form. Any variations in the form line are required to be corrected using a granular material in lifts of 1/2 in. or less and compacted after placed. This material is required to extend 18 in. on either side of the form.

FORM SETTING

After the forms have been set to the proper line and grade, the grade is required to be tamped along the inside and outside edges of the forms.

Each form is required to have three form pins securing the form to the ground. Two of these pins are placed at the ends of the form. Each form is locked to the next form and is required to be free from play or movement in any direction. All forms are cleaned and oiled before concrete is placed. The Technician is required to verify that all pin locks are secure.

GRADE AND ALIGNMENT

Before placing the concrete, form alignment and grade are compared to grade stakes. Any variation of 1/8 in. or more from the proper grade is required to be corrected. Likewise, any variation along the face of the forms of 1/4 in. or more also is corrected. The forms are checked for stability at this time.

If distance permits, forms are prepared at least 500 ft ahead of concrete placement. If the material under the forms becomes unstable, the affected forms are required to be removed and the base repaired.