

ACI CODE-320-25
Post-Tensioned Structural Concrete—Code Requirements and Commentary
Reported by ACI Committee 320

ERRATA as of February 24, 2026

Section 7.6.3.3, pg. 47, this section was inadvertently omitted. Add.

7.6.3.3 If shear reinforcement is required, $A_{v,min}$ shall be in accordance with 9.6.3.4.

Section 8.3.4.1, pg. 54, change $\sqrt{f'_c}$ to $6\sqrt{f'_c}$.

Post-tensioned slabs shall be designed as Class U with $f_i \leq 6\sqrt{f'_c}$.

Section 24.5.3.2 and R24.5.3.2, pg. 228, change f'_c to f'_{ci}

Table 24.5.3.2—Concrete tensile stress limits immediately after transfer of prestress, without additional bonded reinforcement in tension zone

Location	Concrete tensile stress limits
Ends of simply supported members	$6\sqrt{f'_c}$ $6\sqrt{f'_{ci}}$
All other locations	$3\sqrt{f'_c}$ $3\sqrt{f'_{ci}}$

~~R24.5.3.2~~ The tensile stress limits of ~~$3\sqrt{f'_c}$~~ and ~~$6\sqrt{f'_c}$~~ refer to tensile stresses at transfer of prestress at locations other than the precompressed tension zone. Where tensile stresses exceed the permissible values, the total force in the tensile stress zone may be calculated and reinforcement proportioned on the basis of this force at a stress of $0.6f_y$, but not more than 30,000 psi. The effects of creep and shrinkage begin to reduce the tensile stress almost immediately; however, some tension remains in these locations after allowance is made for all prestress losses.

ERRATA as of August 21, 2025

Section 24.5.3.1, pg. 143, Table 24.5.3.1: replace the square root values with the following:

Table 24.5.3.1—Concrete compressive stress limits immediately after transfer of prestress

Location	Concrete compressive stress limits
End of simply-supported members	$-0.70\sqrt{f_{ci}}$ $0.70f_{ci}'$
All other locations	$-0.60\sqrt{f_{ci}}$ $0.60f_{ci}'$

Section 24.5.4.1, pg. 143, Table 24.5.3.1 and Section R24.5.4.1: replace the square root values with the following:

24.5.4.1 For Class U and T members, the calculated extreme concrete fiber stress in compression at service loads, after allowance for all prestress losses, shall not exceed the limits in Table 24.5.4.1.

Table 24.5.4.1—Concrete compressive stress limits at service loads

Load condition	Concrete compressive stress limits
Prestress plus sustained load	$-0.45\sqrt{f_c}$ $0.45f_c'$
Prestress plus total load	$-0.60\sqrt{f_c}$ $0.60f_c'$

R24.5.4.1 The compressive stress limit of ~~$0.45\sqrt{f_c}$~~ $0.45f_c'$ was originally established to decrease the probability of failure of prestressed concrete members due to repeated loads. This limit also seemed reasonable to preclude excessive creep deformation. At higher values of stress, creep strains tend to increase more rapidly as applied stress increases.

Fatigue tests of prestressed concrete beams have shown that concrete compressive failures are not the controlling criterion. Therefore, the stress limit of ~~$0.60\sqrt{f_c}$~~ $0.60f_c'$ permits a one-third increase in allowable compressive stress for members subject to transient loads.

Sustained live load is any portion of the service live load that will be sustained for a sufficient period to cause significant time-dependent deflections. Thus, when the sustained live and dead loads are a large percentage of the total service load, the ~~$0.45\sqrt{f_c}$~~ limit of Table 24.5.4.1 typically controls. On the other hand, when a large portion of the total service load consists of a transient or temporary service live load, ~~$0.60\sqrt{f_c}$~~ $0.60f_c'$ the increased stress limit of ~~$0.60\sqrt{f_c}$~~ typically controls.

The compression limit of ~~$0.45\sqrt{f_c}$~~ for prestress plus sustained loads will continue to control the time-dependent ~~$0.45f_c'$~~ behavior of prestressed members.

$0.45f_c'$