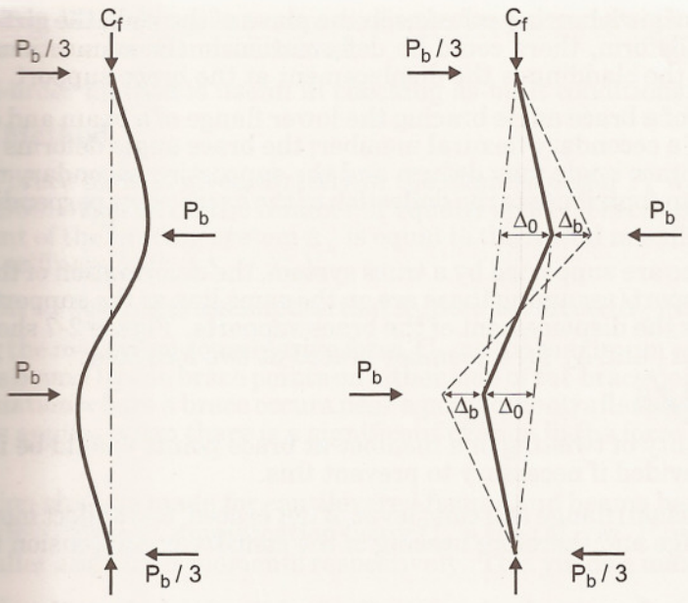

The solid line represents the initial misalignment. The dotted line represents the final displaced configuration due to all the forces acting on the system.

Figure 2-7
Δ_0 and Δ_b - Two Braces

1998) has summarised many of the design requirements for bracing

itional discussion on member bracing, refer to Galambos (1998) .

l Misalignment at Brace Point

also showed that a critical parameter in designing the bracing is the initial ghtness Δ_0 at the brace point. Based on S16 tolerances (Clause 29.7.6) a of no more than 0.002 times the distance between brace points may be used r's model. A common construction technique used to reduce the initial mis- is to pull the structure within tolerance at brace locations. Thus when the pulled into alignment one brace point at a time the Δ_0 that results is the erance over a length of $2L$, i.e. $0.002L$ where L is the distance between brace

2-7 shows the critical values of Δ_0 when two brace points exist.

lacement of Bracing Systems

e displacement of the member being braced at the brace point perpendicular ber caused by the force P_b and any other external forces. This deflection may lt of axial shortening or elongation of the bracing or its flexural displacement on whether the bracing resistance is provided axially or by bending. In addi- brace deformation, the brace connection deformation and the brace support nt must be included.

mplified method of analysis is premised on a displacement Δ_b not greater nd therefore Δ_b shall not exceed Δ_0. When justified, this limit may be ex- ither of the detailed methods.