

# Application of LimitState:SLAB to slab analysis problems

Tom Pritchard | LimitState:SLAB Product Manager



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TITLE

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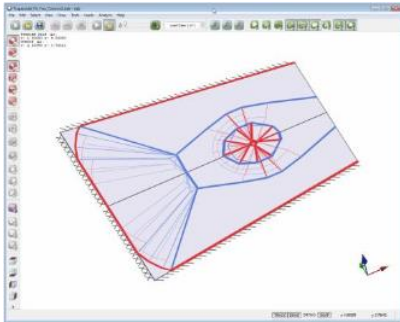


# About Me



- PhD Structural Layout Optimization 2005
- Joined LimitState 2007
- Working on embedding optimization technology into end-user software
- LimitState:SLAB product manager

## LimitState:SLAB Vision



- Encapsulate the new method in a useable software product
- Make the technology accessible to engineering end-users
- Do this in an unencumbered way so that practitioners can benefit



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# Examples

1. Software interface
2. Wizards and general usage
3. Arbitrary geometry
4. Complex geometry (apartment block floor slab)
5. Bridge example



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# Adequacy Factor

## Unit partial factors

Adequacy factor = multiplier on applied loading

## Non-unit partial factors

Adequacy factor  $\geq 1$  for the system to be deemed safe under the applied loading



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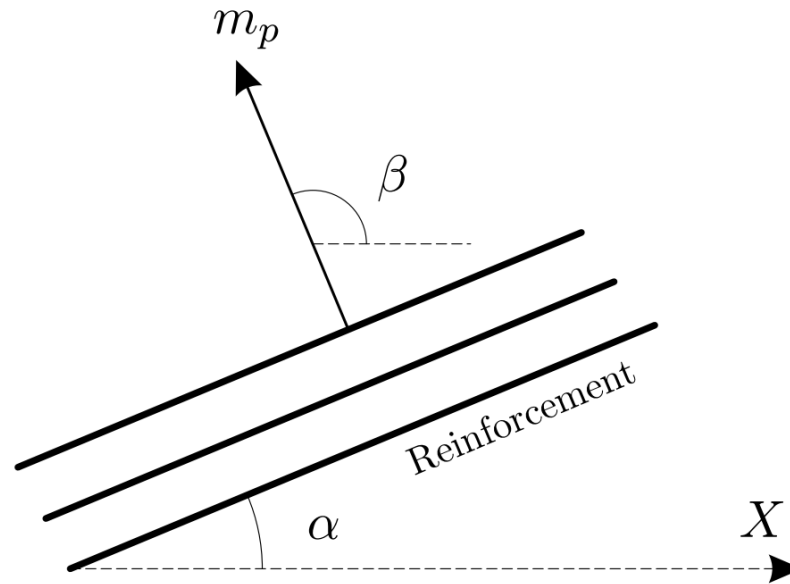
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# Moment Resistance ( $M_p$ ) Direction



For **reinforcement at an angle  $\alpha$**  to the global X axis, the moment resistance it contributes is taken **normal** to the reinforcement.



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The remainder of the presentation involved demonstration of the LimitState:SLAB software.

Webinars involving demonstration of the software will shortly be available for viewing at:

[www.limitstate.com/webinars](http://www.limitstate.com/webinars)



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