



**KASA Redberg**

*Engineers & Technical Trainers*

# ***Wind Loading to AS/NZS 1170.2***

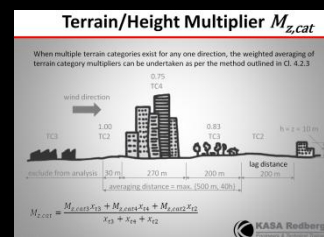
***Online (e-Learning) Training Course***



**KASA Redberg**

*Engineers & Technical Trainers*

KASA Redberg Pty Ltd ABN 35 107 585 375  
PO Box 459, Balgowlah, NSW, 2093, Australia  
Ph: +61 (0)2 9949 9795 Fax: +61 (2) 8246 6387  
Web: [www.kasa.com.au](http://www.kasa.com.au) Email: [info@kasa.com.au](mailto:info@kasa.com.au)



# Wind Loading to AS/NZS 1170.2

## Course Synopsis

### MODULE 1 – INTRODUCTION & BACKGROUND

- Brief History and Background
- Wind Forces
- Derivation of Design Wind Pressure
- The Scope of AS/NZS 1170.2
- Exclusions

### MODULE 2 - SPEED

- Wind Speed Definitions
- Regional Wind Speed
- Site Wind Speed
- Wind Direction Multiplier
- Terrain/Height Multiplier
- Shielding Multiplier
- Assessing Terrain & Shielding
- Topographic Multiplier

### MODULE 3 – DESIGN WIND PRESSURE

- Design Wind Pressures
- The Aerodynamic Shape Factor
- Openings
- Determining  $C_{fig}$

### MODULE 4 – VIDEO TUTORIAL

- Worked Example Problem – Freestanding Wall

### MODULE 5 – VIDEO TUTORIAL

- Worked Example Problem – Rectangular Building

### MODULE 6 – DOMINANT OPENINGS

- Wind Tunnel Simulation – Dominant Openings

### MODULE 7 – FREE ROOFS

- Wind Tunnel Simulation – Free Roofs

### MODULE 8 – DYNAMIC RESPONSE FACTOR

- Introduction to the Dynamic Response Factor
- Wind Sensitive Structures
- Rigidity and Serviceability
- Factors Affecting Natural Frequency
- Determining the Natural Frequency
- Calculating the Dynamic Response Factor

### MODULE 9 – THETA AND WIND DIRECTION

- Theta and Wind Direction

### MODULE 10 – FORCES

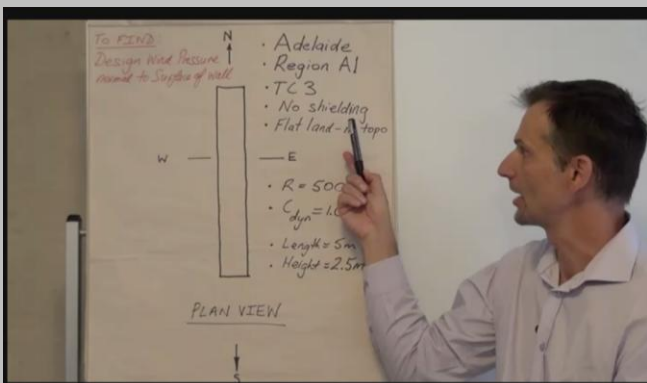
- AS/NZS 1170.2 Section 2.5
- Force Resultants

### MODULE 11 – VIDEO TUTORIAL

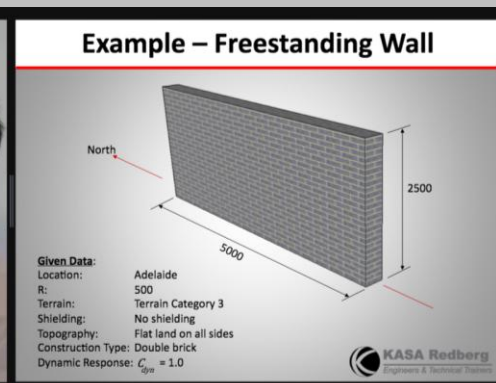
- Worked Example Problem – Sewer Vent Stack

### MODULE 12 – QUIZ

- End of Course Quiz



### Example – Freestanding Wall



**Given Data:**

Location:	Adelaide
R:	500
Terrain:	Terrain Category 3
Shielding:	No shielding
Topography:	Flat land on all sides
Construction Type:	Double brick
Dynamic Response:	$C_{fig} = 1.0$

