

OVERVIEW: Windows are used in all claddings, how to detail the window sill, jamb and head for stucco will vary based on the following factors:

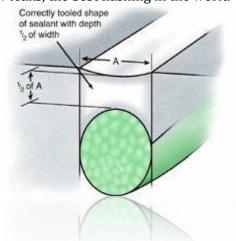
- The type or style of window. There are basically flanged and non-flanged style windows.
- Consider structure and its location. For example, a concrete high-rise in Miami will require more attention than a single story home in Arizona.
- Consider the window itself. Windows perform differently, this is typically expressed as a Performance Class (PC) through AAMA (American Architectural Manufcaturers Association)

This SMA collection of various window details are not meant for any specific project. They are only to assist designers on options/concepts. They are also not meant to limit optional or alternative options. The designer of record shall approve and should consider the three bullet points when selecting or creating a new window detail. The window and stucco manufacturer may have specific requirements and these will supersede SMA recommendations.

DESIGN PRESSURE: Three-coat stucco, properly applied, meets the AW Performance class . Windows must be selected to meet or exceed the Performance Class (PC) established by AAMA for the opening. This will include a Design Pressure (DP) and Performance Grade (PG) rating for structural integraity and water resistance. If the window leaks, the best flashing in the world

becomes a moot point. Most windows will require a casing bead with a functional sealant joint. Refer to SMA Technical Bulletin "Flashing a Nail Flange Style Window for Stucco" for conditions that may allow stucco to directly abut a window frame.

The <u>sealant joint</u> width (A) should not be less than ¼ inch wide or exceed ¾ inch. The joint should be tooled to be hour glass shaped, this allows more flexibilty. The depth should be ½ of the width. This size joint, using approved materials, is acceptable for most structures across all regions of the country.

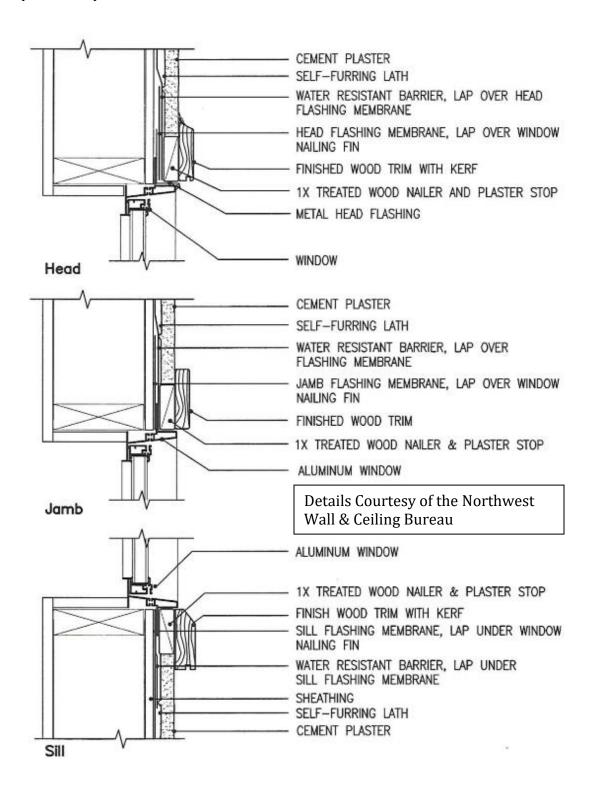


AAMA PERFORMANCE GRADES/CLASS

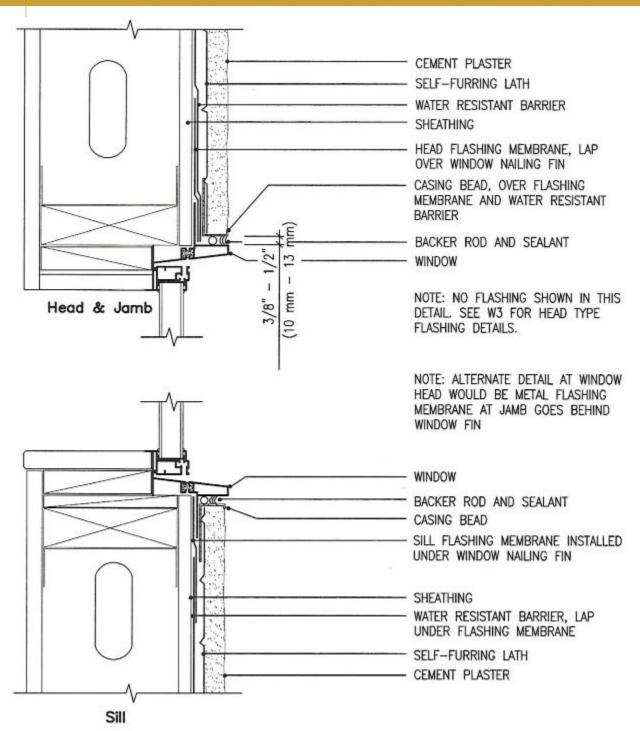
- 15 psf for R class (commonly used in one- and two-family dwellings) 25 psf for LC class (commonly used for low- and mid-rise multifamily dwellings and other buildings where larger sizes and higher loading requirements are expected)
- 30 psf for the new **CW class** (commonly used in low- and mid-rise buildings where larger sizes, higher loading requirements, limits on deflection and heavier use are expected)
- 40 psf for the AW class (commonly used in high-rise and mid-rise buildings to meet increased loading requirements and limits on deflection and in buildings where frequent and extreme use of the fenestration products is expected)



STUCCO: Portland cement plaster (stucco) installed per SMA, ASTM,Code and manufcaturers requirements meets AW class design pressures. In the event of conflicts, manufacturers requirements prevail.



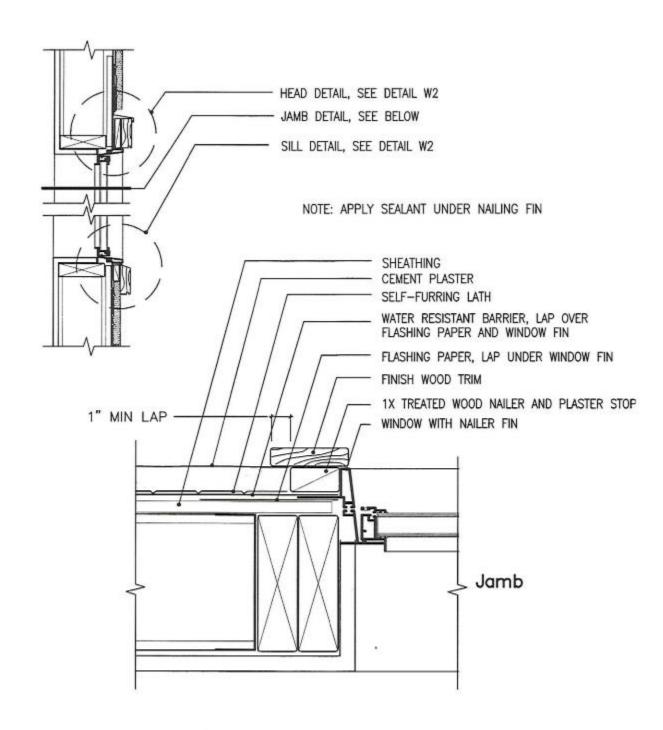




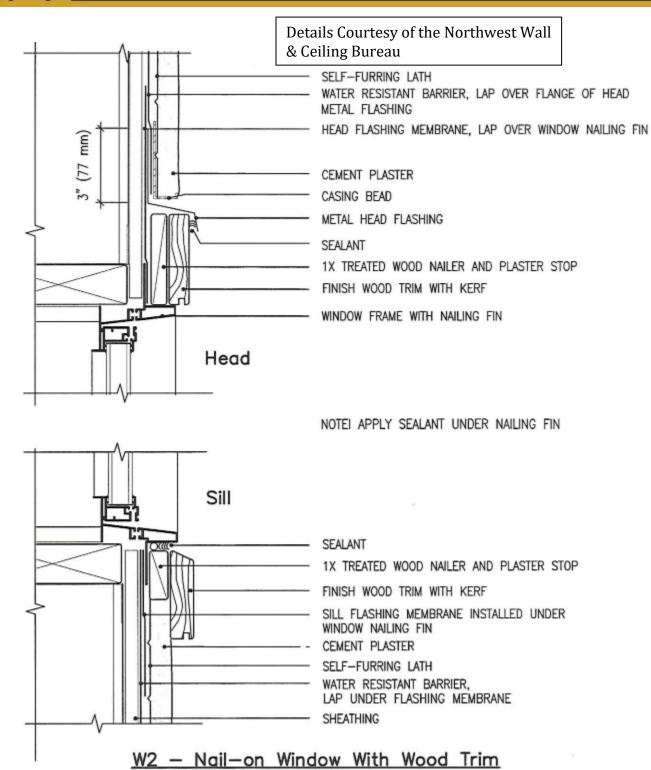
W6 - Nail-on Window

SMA NOTE: Stucco may directly abut the window frame if the conditions of SMA Technical Bulletin "*Flashing a Nail Flange Style Window For Stucco*" have been met. Details courtesy of the Northwest Wall & Ceiling Bureau.

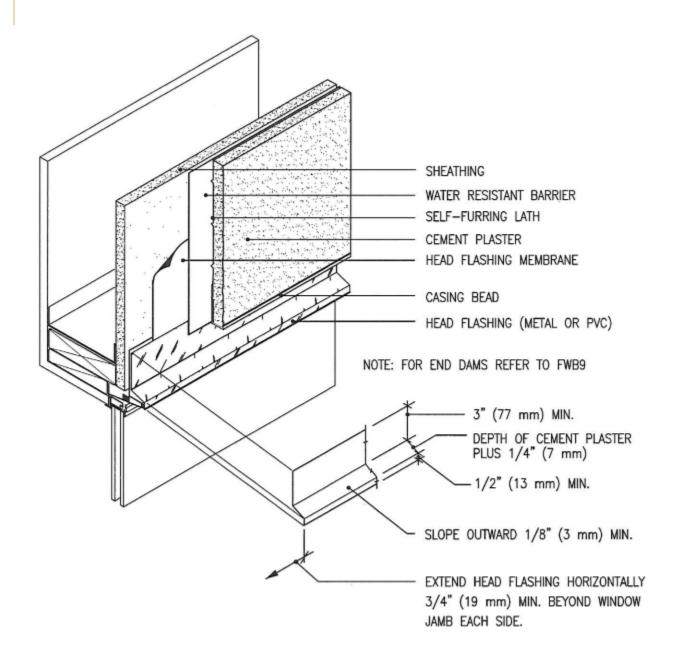




W1 - Nail-on Window with Wood Trim



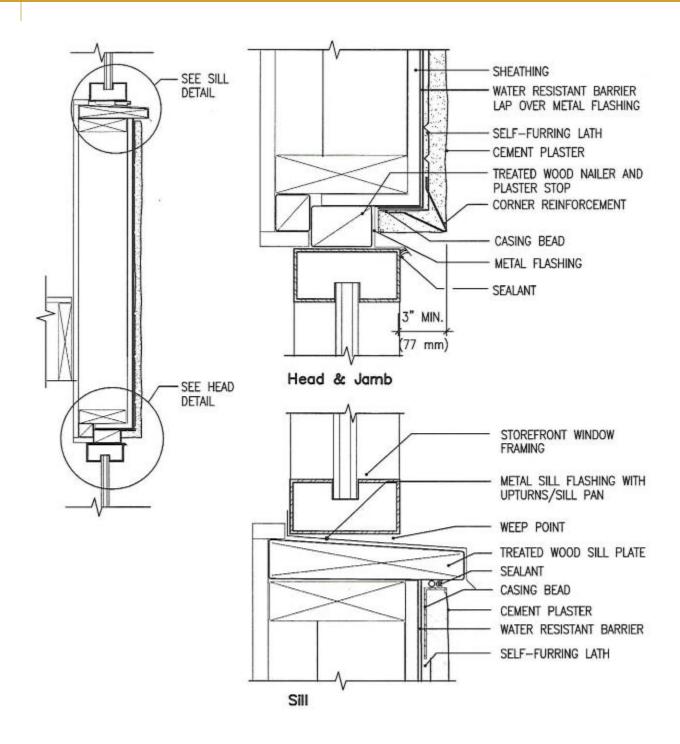




<u>W3 - Window Head Flashing</u> (Fabricated From Metal or PVC)

SMA NOTE: Head Flashing Membrane may be placed <u>over</u> the Head Flashing (Metal or PVC)



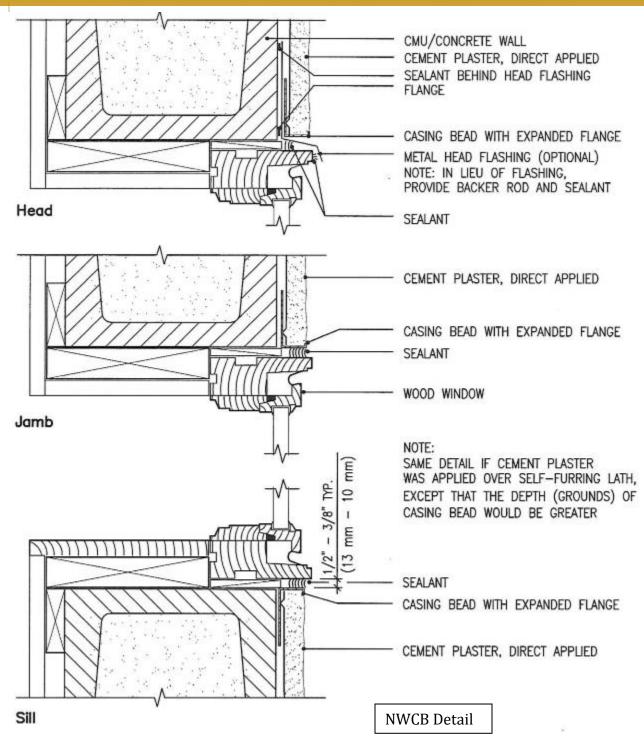


<u>W9 - Storefront Window Set-back</u>

NWCB Detail

SMA NOTE: A sheet metal sill pan is recommended for all Storefront style windows, particularly when the window is set-back. Stucco may terminate under the lip of the sill pan when set in a bed of sealant. For a sloped stucco sill in to window refer to page 13.

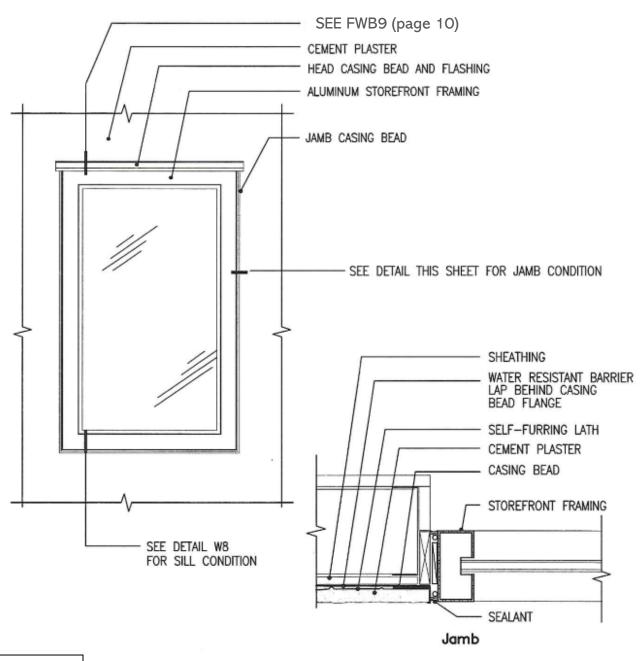




W10 - Wood Window/Concrete Masonry

SMA NOTE: This detail is acceptable for metal and PVC style windows on CMU or concrete. Lath is not required for cement plaster on CMU.



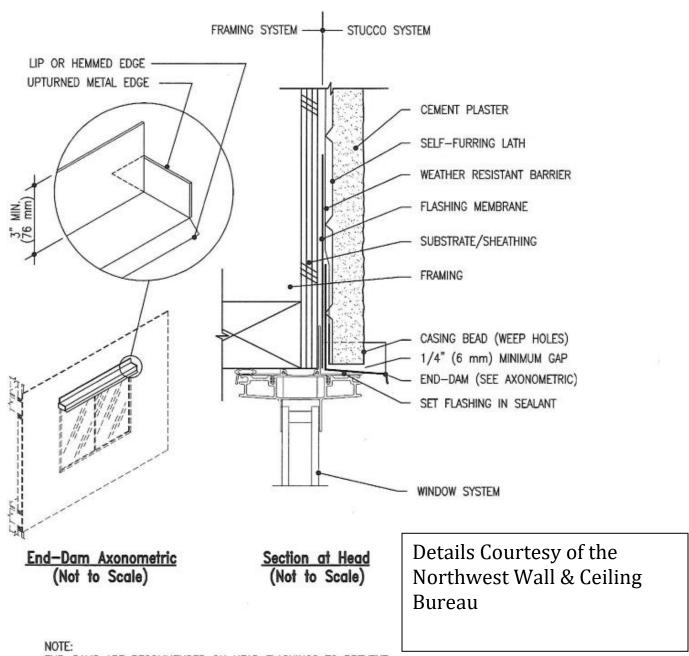


NWCB Detail

W7 - Storefront Window

SMA NOTE: This is a basic stucco detailing method for all non-flanged style windows. Head flashing is not always required and a sealant joint is acceptable in low and mid rise structures in Dry zones (B) per the 2015 IECC climate zone map C 301.1. Moist (A) and Marine (C) should have head flashings if not protected by overhangs or above a single story in height. Flangeless windows require a selant around sill and jambs in all zones unless protected from rain.

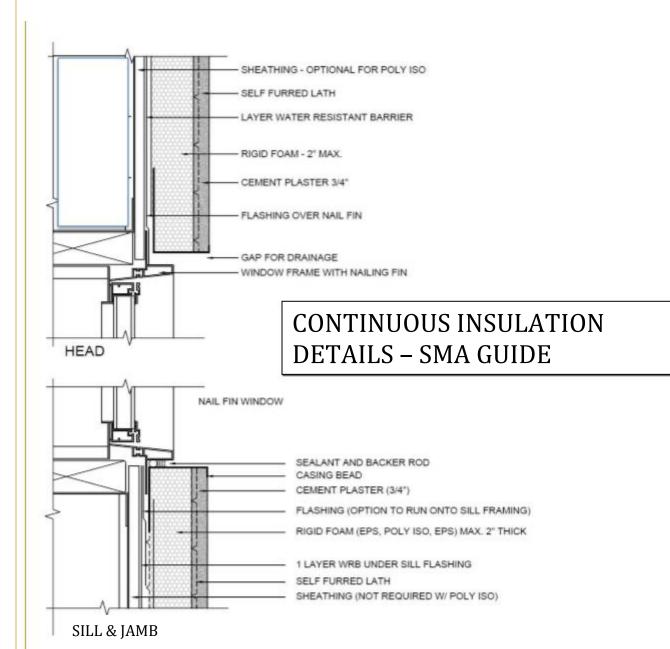




END-DAMS ARE RECOMMENDED ON HEAD FLASHINGS TO PREVENT MOISTURE FROM ENTERING THE STUCCO AT JAMB AREA. END-DAMS SHALL BE COMPATIBLE WITH THE HEAD FLASHING MATERIAL. THIS EXAMPLE IS AN END-DAM AS AN UPTURNED METAL EDGE.

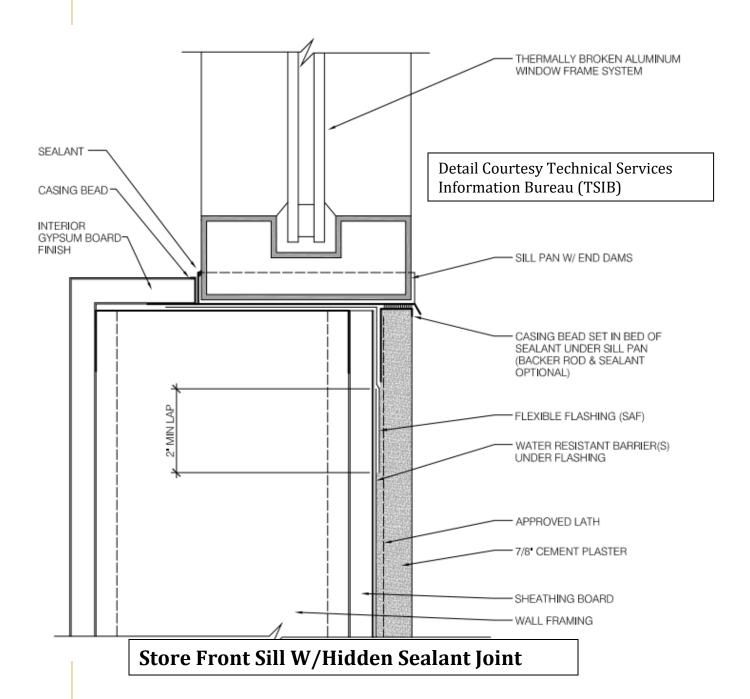
FWB9 - Window Head Flashing Assembly

SMA NOTE: End dams are recommended but not required, see note on W-7.



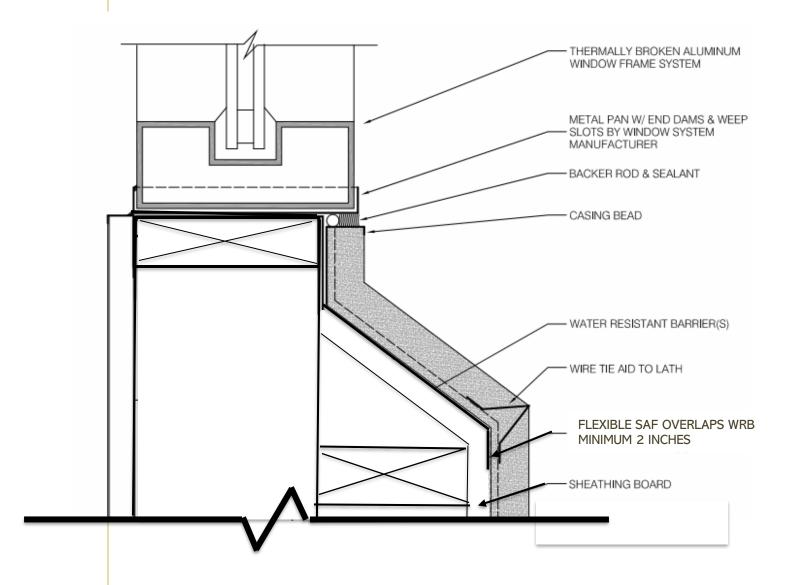
SMA NOTES:

- Flashing for the Nail Flange (Fin) style window to be per the SMA technical bulletin "Flashing a Nail Flange Style Window for Stucco".
- Single layer WRB may be used under rigid foam if the the foam has drainage channels or drain mat
- Metal Head Flashing (Optional) may be added to window head.
- Using a one-coat stucco system, with larger window frames and following SMA Flashing guidelines may eliminate need for a casing bead and sealant joints, if allowed by the onecoat stucco manufacturer



- The Sill Pan (all corners sealed) end dams should be a minium 34 inch in height
- Flexible SAF should be a minimum 40 mils and lap over framing full depth of window frame
- See page 9 for jamb details

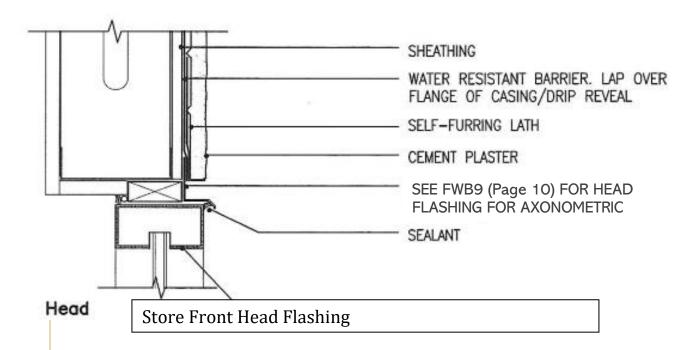




Store Front Style Window In-Set

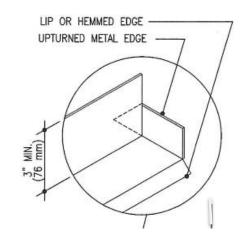
• See page 7 for Head Detail





SMA NOTES:

- Casing bead should have weep (drip) holes. If no weep holes, WRB should be behind casing bead flange and over head flashing flange
- Head Flashing & Casing may be a one-piece trim accessory



END DAMS FOR HEAD FLASHING

The SMA is a national industry wide not-for-profit trade association dedicated to the promotion and education of the stucco industry. The SMA can provide no warranty, express or implied for information contained herein. This is a guide paper. The local Building Department has final approval of allowed alternates. Graphics courtesy of the Northwest Wall & Ceiling Bureau and Technical Services Information Bureau. Each associaiton (NWCB and TSIB) have additional details available to designers.