NUDURA™ Wall Form Thickness Selection Chart

This simple reference matrix is produced to assist engineers, architects and design professionals in selecting an appropriate core thickness of NUDURA forms for optimum wall performance (i.e. to yield the most efficient combination of concrete and steel for required condition).

IMPORTANT NOTE: The recommendations contained in this document are intended as a general guideline only and should not be construed as a substitute for proper engineered design to ACI 318 (USA) or CAN/CSA A23.3 (CAN) Standards. Rather, this document is intended as a guideline to aid in selection of an appropriate form thickness for a suggested wall height or building type for budget, quotation or preliminary design consideration purposes ONLY. In addition it is important to note that special local contributing factors such as high clay content in soils , high seismic velocities or wind pressures in excess of 21 psf (20 mph to 40 mph) or (1.0 kPa) may dictate selection of a thicker core form if the design condition is close to the maximum heights suggested in this document. In most cases, for North America- the suggested recommendations herein will result in optimum reinforcing patterns capable of resisting the required loadings for each scenario. Wherever the term "Consult Engineering" is used, this suggests that one should consult professional design advice regarding the core thickness being considered for the height noted before making decision to use that core thickness noted in their quotation or estimation.

Form Thickness	Foundation Limits	Single Storey Limitation	Multi Storey Limitation	Common Building Types
4"	Foundation walls not permitted	Safe to 10′ >10′ – Consult Engineering	2 stories structural 10′ floor to ceiling height and curtain walls	Exterior walls of: houses – single, semi & townhouse, small offices – single or 2 storey
6"	8′ – clay 9′ – gravel 10′ – Consult Engineering	Safe to 14′ – 16′ >16′ – Consult Engineering	3 stories ≥4 with Eng. Design 10′-14′ ht/floor	Almost any building type – maximum 16′ Single Storey height without Pilasters
8"	9′ – clay 10′ – gravel 11′ – Consult Engineering	Safe to 16′ – 35′ >35′ – Consult Engineering	Lower 2-4 floors of 5-8 stories (use 6" on upper 2-3 stories)	Warehouses, theatres, church tall walls Lower floors of hotels, condos, apartments
10"	10′ – clay 11′ – gravel 12′ – Consult Engineering	Safe to 35′ – 45′ >45′ – Consult Engineering	Lower 2-4 floors of 9-12 stories	Under ground garages, theatre walls, fly lofts Lower floors of hotels, condos, apartments
12"	11′ – clay 12′ – gravel ≥13 Consult Engineering	Safe to 45′ – 50′ >50′ – Consult Engineering	Consult Engineering	Heavy tall industrial applications Deep foundation walls