



# Combined walls

A Combined Wall (also referred to as a "Combi-wall") is a structural design for a bulkhead wall using a combination of pipe, beams, and/or sheetpiling that are connected with interlocks in order to provide a very high strength alternative to typical sheetpiling designs.

As project requirements vary greatly, the component choices can be custom designed to meet almost all specifications. The choices includes: sheet piling with beams, sheet piling with pipe piling, beams only with interlocks, and pipe piling only with interlocks. With the many options for sheet piling, wide flange beams and pipe piling, the design options and properties are almost limitless.

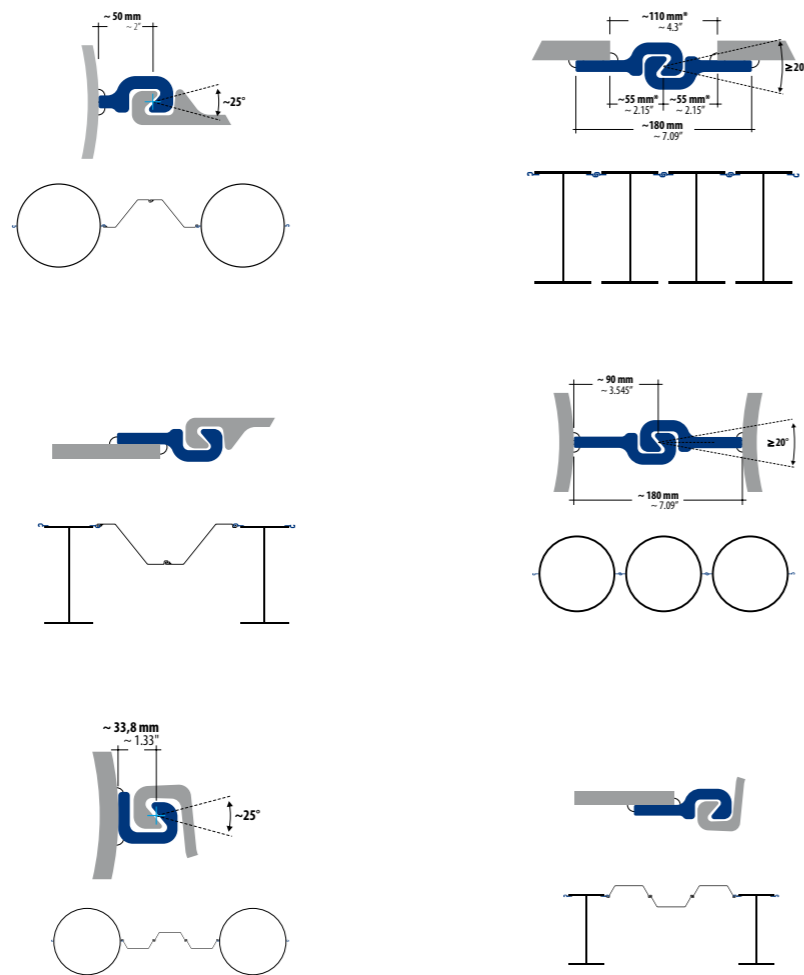
The Meever Group has the capability to provide value-engineered designs, material procurement, fabrication, corrosion protection and shipping from multiple locations domestically and worldwide to meet any project requirements with delivery and budget concerns kept in mind.

**Pipe-Z Sheetpiling System** is composed of large diameter pipe, weld-on interlock connectors and Z sheetpiling between pipes. The sheetpiling transfers load to the pipe which carries the majority of the required strength. Pipe piling is available in multiple sizes and grades in order to meet the required properties.

**Beam-Z Sheetpiling System** is similar to the Pipe-Z System with wide-flange beams replacing the pipe. With the many beam sizes available, this system is also very versatile.

**Pipe-to-Pipe (or Beam-to-Beam) Wall Systems** with weld-on interlocks are available to provide the greatest design capacity alternatives.

If a design is specified on a project, the Meever Group can provide a value-engineered alternative that can potentially produce time and cost savings.



## Example designs

**Example design**

King Pile	Sheet pile	Section Modules	Moment of Inertia	System Width
		in <sup>3</sup> /ft	in <sup>4</sup> /ft	inch
W 36 x 160	ESZ 19-700 A572 GR.50	112.9	2188.6	67.13

**Example design**

Section	Section Modules	Moment of Inertia	Width	Height	Thickness		Weight unit	Weight	Coating 2 sides	Cross section area
	in <sup>3</sup> /ft cm <sup>3</sup> /m	in <sup>4</sup> /ft cm <sup>4</sup> /m	inch mm	inch mm	inch mm	inch mm	lbs/ft kg/m	lbs/ft <sup>2</sup> kg/m <sup>2</sup>	ft <sup>2</sup> /ft m <sup>2</sup> /m	in <sup>2</sup> mm <sup>2</sup>
42"x0.650 pipe with ESZ 19-700	107.87 5,700	2,484 339,211	99.72 2,532.8	42 1066.76	0.650 16.51	0.375 9.53	407.02 605.71	48.98 239.14	25.04 7.63	116.35 75,064

