

# Wheel building guidelines for Kindernay XIV

(28h SWAP shell for 135/142/148mm O.L.D. spacing)

**EXTREMELY IMPORTANT: Pay close attention to the Kindernay specific spoke lacing. Follow the illustration below.**

Note: It is highly recommended that the wheel building is performed by an experienced wheel builder. Damages to the SWAP shell caused by an incorrectly built wheel will not be covered by warranty.

The large diameter and symmetric hub flanges make the SWAP shell an ideal base for a strong and lightweight wheel. Wheel building on the Kindernay SWAP shell is pretty straightforward, but there are a few things to be aware of, namely the extra spoke length vs. regular hubs and [the specific lacing pattern and direction of the spokes exiting the shell.](#)

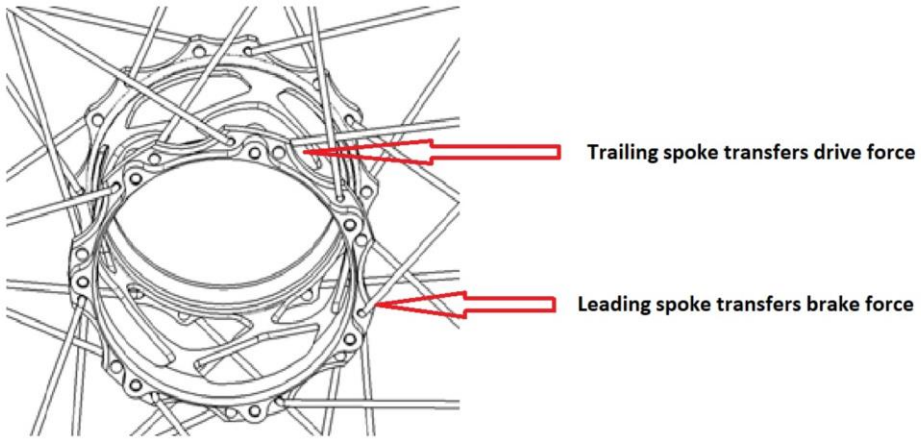
Hub data for input values when using a spoke length calculator:

(For example. WheelPro (<https://www.wheelpro.co.uk/spokecalc/>))

- Hub/flange diameter left side: 100mm
- Hub/flange diameter right side: 100mm
- Flange offset left side: 28mm
- Flange offset right side: 28mm
- Spoke hole diameter: 2.6mm
- Number of spokes: 28
- Lacing pattern left side: 2 cross
- Lacing pattern right side: 2 cross

**NB:** Due to the staggered spoke hole pattern of the SWAP shell, add 2.5-3mm vs. the calculated spoke length for 26", 27.5" and 29" wheels.

**EXTREMELY IMPORTANT: Follow the illustration below for the correct lacing pattern and direction of the spokes exiting the spoke holes of the SWAP shell. This is very important in order to avoid excess stress on the spoke flanges.**



View from the non-driveside

**KINDERNAY**