

# Using the Suunto Hand Bearing Compass



*Figure 1: A Suunto Bearing Compass*

The Suunto bearing compass is used to measure an object's bearing angle relative to magnetic North. The compass has a second scale for reading bearing angle from South. It is designed for viewing an object and its bearing angle simultaneously. This application note outlines the basic steps for using the Suunto bearing compass.

## Taking a Bearing

1. **Site distant object.** Use one eye to view distant object and the other to look into compass. With both eyes open, visually align vertical marker inside compass to distant object.

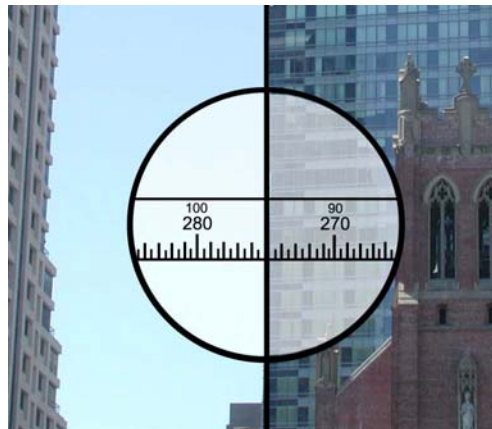


*Figure 2: Sighting an object*



*Figure 3: Aligning compass sight and distant object.*

2. **Take a reading.** Every ten-degree marker is labeled with two numbers. The bottom number indicates degrees from magnetic North in a clockwise direction. The top number indicates degrees from magnetic South in a clockwise direction.



*Figure 4: Composite view through compass sight. The building edge is 275° from magnetic North.*

- 3. Account for difference between true North and magnetic North.** The compass points to magnetic North. The orientation of an object is measured in degrees East from North. The orientation of an object in San Francisco (and in the Bay Area) to true North is the compass reading from magnetic north plus 15°. The building edge in Figure 4 is 275° from Magnetic North. Therefore, the building edge in Figure 4 is 290° (275° + 15°) from true North. Visit one of the websites below for the magnetic declination for other locations.

<http://www.ngdc.noaa.gov/seg/geomag/jsp/Declination.jsp>- Easy form with detailed calculation.

[http://www.gsc.nrcan.gc.ca/geomag/field/mdcalc\\_e.php](http://www.gsc.nrcan.gc.ca/geomag/field/mdcalc_e.php)- Simple calculator.

- 4. Nearby iron and metal objects may affect compass accuracy.** If possible, remove such objects or take compass readings from another location. Re-bars inside concrete can also affect compass accuracy.