

# Washington Headquarters Candle™

**W**ashington's Headquarters State Historic Site in Newburgh, N.Y., situated on the Hudson River facing Beacon, N.Y., was the longest-serving headquarters for George Washington during the Revolutionary War. Washington and his staff occupied the Hasbrouck

## 21st century candlepower

Existing LED candles do not capture the subtleties of the original spermaceti flame, which burns with a soft golden white color accompanied by a blue and black core.



A combination of fiber optics and LEDs provides the distinct blue core and amber flame (right) that closely simulates the flame of the spermaceti replica (left).

House on the estate in Newburgh from 1782 to 1783, and it was there that Washington signed the documents to end the war, and where the United States of America was born.

During that time, Washington and the other occupants of the house used a spermaceti, or whale oil, candle for general lighting and reading.

Today, the original wood frame Hasbrouck House is open to the public as a museum. To reduce the risk of fire in the home, the LRC was asked to create an alternative to the original spermaceti candle using modern technology while maintaining an ambiance reflective of the late 1700s.



The historic Hasbrouck House.

Mentored by the LRC DesignWorks staff, an LRC student created the Washington Headquarters Candle™ using both LED and fiber optic technology. Fiber optic strands are fed by a blue LED at the candle base to channel the blue tone into the core of the flame. Warm white and amber LEDs channel the golden white color into the surrounding flame.

The Washington Headquarters Candle™ is designed to allow visitors and staff to navigate the house safely while experiencing a setting and mood very similar to that of the late 1700s. The museum headquarters has expressed interest in selling the candle in its gift shop and other historic sites throughout New York.



View LRC Project Sheets at  
[www.lrc.rpi.edu/resources/newsroom/projectsheets.asp](http://www.lrc.rpi.edu/resources/newsroom/projectsheets.asp)

Lighting  
Research Center