Loss of contact inhibition is a hallmark of cancer cells that can lead to metastasis, an often lethal process responsible for 90% of cancer-related deaths. Identifying changes in metastatic cancer cells versus normal cells that lead to the loss of contact inhibition has important therapeutic implications. Micropatterns and time lapse microscopy were used to study contact inhibition in normal mammary epithelial cells and metastatic breast cancer cells. Results indicate a distinction between size dependent and size independent modes of contact inhibition in cancer.