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A Science Service Feature

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? WHY THE WEATHER ?

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ORIENTED HOUSES

Running city streets from north to south and from east to west, and building houses facing the four cardinal points of the compass doubtless makes it easier to remember the directions but has serious climatic disadvantages. Streets running east and west, if lined with high buildings, will receive little or no direct sunlight during half the year. In the summer they will fail to get the benefit of much of the breeze, which is likely to be from some southerly direction in the hottest weather.

If houses are faced northeast, southeast, southwest or northwest instead of directly north and south, east and west they will receive some sunlight on every side throughout the year. A north wall is in shadow from March 21 to September 21, while a northeast or northwest wall may get roughly from one to two hours of direct illumination even on December 21, in latitudes of the United States. Estimating it in another way, measurements in Iowa show that if a window on the north side of a building gets one unit of sunlight in a year, a south window receives 45 units, an east or west window 27, and a southeast or southwest, 38. Northwest or southwest exposures are good for bedrooms, as the late sleeper is not disturbed by the early sun and during the hottest days of summer the southwest or west winds, which usually accompany hot spells, will blow into the bedrooms.

(Tomorrow: Forest Fires and Weather)

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