CLAIMS

1. A corrosion-resistant member comprising:

a base material containing aluminum or an aluminum alloy; and

a corrosion-resistant coating film formed on a surface of the base material, wherein

the corrosion-resistant coating film formed of aluminum fluoride hydroxide $AlF_{3-x}(OH)_x$ in which a space group belongs to R-3c, and x in the $AlF_{3-x}(OH)_x$ is 0.05 or more and 1.00 or less.

2. The corrosion-resistant member according to claim 1, wherein x in the $AlF_{3-x}(OH)_x$ is 0.10 or more and 0.70 or less.

3. The corrosion-resistant member according to claim 1, wherein x in the $AlF_{3-x}(OH)_x$ is 0.15 or more and 0.50 or less.

4. The corrosion-resistant member according to any one of claims 1 to 3, wherein a half width of a maximum intensity peak obtained by analyzing the aluminum fluoride hydroxide by an X-ray diffraction method is 0.50° or less.

5. The corrosion-resistant member according to any one of claims 1 to 4, wherein

the base material contains an aluminum alloy containing magnesium, and

an intermediate layer containing magnesium fluoride is arranged between the base material and the corrosion-resistant coating film.