In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
from statsmodels.graphics.tsaplots import plot_acf
```

In [2]:
```
df = pd.read_csv(
    r"C:\Users\HP\OneDrive\Desktop\NLP\Data\ML471_S1_Datafile_Concept.csv"
)

# Convert DATE column to datetime
df['DATE'] = pd.to_datetime(df['DATE'])

# Set DATE as index
df.set_index('DATE', inplace=True)
```

In [3]:
```
plt.figure(figsize=(12, 5))
plot_acf(
    df['Consumption'],
    lags=380,          # adjust based on data length
    alpha=0.05
)

plt.title("Autocorrelation Plot")
plt.xlabel("Lag")
plt.ylabel("Autocorrelation")
plt.grid(True)
plt.show()
```

```
<Figure size 1200x500 with 0 Axes>
```