

QUESTIONNAIRE

for the design of a traffic-light console pole

(to be completed by the customer and sent to the designer before the calculation begins)

Please fill in the fields below in as much detail as possible. Unfilled items will be taken at their default values (see the italic notes), which may lead to an inaccurate calculation or the need to request the data again.

1. Customer and site data

Customer organisation	full name
Contact person	full name, position
Phone / e-mail	
Object name	e.g. "Intersection of ... / ..."
Address / settlement of installation	region, district, city
Number of poles ordered	pcs, broken down by size if different
Desired delivery time	

2. Geometric parameters of the pole

If the exact geometry has not yet been determined, specify at least a range (e.g. "outreach 12–16 m") and a scheme of the intersection (sketch, photo, coordinates) so the optimal length can be selected.

Shaft height H, m	from ground level to the console axis
Console outreach L, m	from the shaft axis to the end of the console
Number of consoles on the shaft	one / two (at what angle to each other)
Height of the console's lowest point above the roadway, m	clearance requirement for the carriageway
Console shape	straight / curved (radius)
Delivery method	one-piece / knock-down (in sections) — due to transport dimensions

3. Climatic conditions at the installation site

The terrain category significantly affects the result — the difference between categories I and IV gives more than a twofold change in the permissible wind load on the equipment.

Region / district of installation	to determine the wind zone per DBN V.1.2-2
Wind zone (if precisely known)	1–5
Terrain category	I — open / II — rural / III — suburb, industrial zone, woodland / IV — urban areas
Climatic version	standard — U1 (from –40 to +40 °C), state otherwise for special conditions
Special site conditions	seismicity, aggressive environment (industrial zone, coast), other

4. Mounted equipment

The exact position of the equipment on the console (distance from the shaft) significantly affects the calculation — the closer to the end of the console, the greater the load on the base. If possible, specify the position for each item.

No.	Equipment name	Qty, pcs	Weight per unit, kg	Dimensions/area, m ²	Distance from shaft, m
1	3-section traffic light				
2	Pedestrian traffic light				
3	Direction indicator / additional section				
4	Road sign				
5	Video camera / detector				
6	Controller / cabinet (on the shaft)				
7					
8					

Traffic light backing board: ☐ not installed ☐ solid ☐ louvered (recommended for wind zone 5)

5. Foundation and soil conditions

In the absence of geological survey data, the foundation will be calculated using conservative (averaged) soil characteristics, with a corresponding note in the calculation report.

Geotechnical survey	attached as a separate file / not available
Soil type (if known)	cohesive (clay) / non-cohesive (sand, gravel) / other
Groundwater level	
Underground utilities in the foundation zone	cables, pipelines — state if present
Permissible foundation type	bored pile / socket foundation / other (at the customer's request)

6. Regulatory requirements

Design standards	DBN V.1.2-2:2006, DBN V.2.6-198:2014 (by default) / Eurocode / AASHTO / other
Design service life, years	by default — 40
Importance category of the structure	if predetermined by the customer

Is a vibration damping device (damper / wing plate) required? ☐ not required ☐ required ☐ at the designer's discretion based on the calculation results

7. Coating and appearance

Anti-corrosion coating	hot-dip galvanising (by default) / other
Painting	none / colour per RAL (state the code)
Customer marking / logo	if required

8. Electrical part

Number and diameter of cable entries	
Earthing requirements	by default — per PUE / other
Control cabinet location	on the shaft / remotely located

Please send the completed questionnaire to the designer. If the source data is insufficient, the calculation will be performed based on conservative assumptions, with all adopted assumptions explicitly stated in the calculation report.

Completed by (full name, position): _____

Date: _____

Signature: _____

Please send the completed form to info@polygonal.com.ua