



ENGINEERS &
GEOSCIENTISTS
BRITISH COLUMBIA

IN THE MATTER OF THE *PROFESSIONAL GOVERNANCE ACT*
S.B.C. 2018, CHAPTER 47

AND

IN THE MATTER OF ALEXANDER DAINOV, P.ENG.
ENGINEERS AND GEOSCIENTISTS BC FILE NO. T22-061

AMENDED CITATION

TO: Alexander Dainov, P.Eng.



TAKE NOTICE that a Panel of the Discipline Committee of the Association of Engineers and Geoscientists of the Province of British Columbia, doing business as Engineers and Geoscientists BC, will meet on a date to be determined, for the purpose of conducting a discipline hearing pursuant to the *Professional Governance Act*, S.B.C. 2018, c.47 (the “PGA”).

AND TAKE NOTICE that in connection with your design for a geodesic dome structure, more particularly described as “6m 3V 22mm x 1.5mm GEODESIC DOME” (the “Geodesic Dome”), the allegations against you are that you:

1. You demonstrated professional misconduct contrary to the *PGA* by authenticating structural engineering calculations for the Geodesic Dome dated February 18, 2021 (the “Structural Engineering Calculations”) that contained the following incorrect conclusion:

“We found that 6m diameter geodesic dome with 26mm × 1.5mm Round Tube Strut Size can withstand wind of 200mph and snow load of 120psf.”

2. You demonstrated professional misconduct contrary to the *PGA* authenticating a drawing dated March 3, 2021 titled “6m 3V PLATFORM” with drawing number 6m3VPLGD (the “Platform Drawing”) that contained the following deficiencies and omissions:

- a. The Platform Drawing lacks dimensions, locations, and sizes of structural members and connections;
- b. The Platform Drawing lacks information regarding the bearing capacity of the supporting soil, details of footings, and any anchor points for the superstructure; and
- c. The Platform Drawing lacks information about the maximum applied load, the applicable codes, and structural standards, contrary to the minimum requirements for structural drawings prescribed by section 2.2.4.3 of Division C of the BC Building Code 2018;

3. You demonstrated professional misconduct contrary to the *PGA* by authenticating a report dated April 21, 2021 with title “STRUCTURAL DESIGN REPORT FOR 6m 3V 26mm x 1.5mm GEODESIC DOME” (the “Structural Design Report”) that contained the following incorrect conclusions, defects, and omissions:

- a. The Structural Design Report includes the following incorrect conclusion with respect to wind load:

“Both numbers are well within safety margin and 6m 3V Geodesic Dome, built with 26mm x 1.5mm struts, can withstand both snow and wind load combinations of 80psf/150mph.”

- b. Section “5. Conclusion” and Section “6. Reference” include the following circular reference that refers the reader to the Structural Design Report itself for additional information regarding nodes and anchor mounting hardware:

“Additional information on nodes, anchor mounting hardware may be found in our comprehensive report as listed below (e)”

[...]

“e) STRUCTURAL DESIGN REPORT FOR 6m 3V GEODESIC DOME 2020”

As a result, the Structural Design Report does not include any information regarding anchors or anchoring points.

4. The existence of the defects, deficiencies, and omissions identified in paragraphs 1, 2, and 3 demonstrate incompetence on your part, contrary to the *PGA*.
5. At the time of authenticating the Structural Engineering Calculations, the Platform Drawing, and the Structural Engineering Report (collectively, the “Geodesic Dome Documents”), you were aware, or ought to have been aware, that the Geodesic Dome Documents, or any of them, would be relied on in support of building permit applications in the province of British Columbia. You demonstrated professional misconduct by authenticating the Geodesic Dome Drawings, which, taken together:
 - a. were not complete for their intended purpose and do not contain the information necessary to construct the Geodesic Dome, including the deficiencies and omissions set out at paragraphs 2 and 3(b);
 - b. do not substantially comply with the BC Building Code 2018, including sections 2.2.4.3 and 2.2.4.6 of Division C; and
 - c. lack detail and depict a functionally incomplete structural system, in particular:
 - i. there is no indication as to how the structure will be stabilized against wind uplift forces: (i) the Geodesic Dome Documents do not include details of anchor points for the Geodesic Dome connections to the platform; and (ii) the Geodesic Dome Documents do not include a footing system capable of withstanding the wind uplift forces; and
 - ii. the covering for the Geodesic Dome is not specified: (i) the Geodesic Dome Documents do not indicate the material that is to be used for the dome covering; (ii) the mechanical properties of the dome covering are not indicated; and (iii) and the manner of connecting the dome covering to the Geodesic Dome is absent.
6. You did not comply with Principle 1 of the Code of Ethics, attached as Schedule A to the Bylaws of Engineers and Geoscientists BC (the “Code of Ethics”) by authenticating the Structural Engineering Calculations and the Structural Design Report, which incorrectly indicated that the Geodesic Dome could withstand wind velocities of up to 200 mph and up to 150 mph respectively, which is false, and which has the potential to jeopardize the safety, health, and welfare of the public.
7. You did not comply with Principle 2 of the Code of Ethics by authenticating the Structural Engineering Calculations when the opinion contained in the Structural Engineering Calculations was outside the area of your expertise and prepared by a non-registrant who was not under your direct supervision. In particular, you relied on a

non-registrant to carry out calculations using Abaqus 2019, which is software that you are not proficient with.

AND FURTHER TAKE NOTICE that you, Alexander Dainov, P.Eng., have the right, at your own expense, to be represented by legal counsel at the hearing by the Panel of the Discipline Committee pursuant to section 79 of the *PGA*, and you or your legal counsel will have the full right to cross-examine all witnesses called and to call evidence in defence and reply in answer to the allegations.

AND FURTHER TAKE NOTICE that, pursuant to section 78 of the *PGA*, in the event you fail to attend or remain in attendance at a discipline hearing held under section 75 of the *PGA*, the Panel of the Discipline Committee may, if satisfied that you have been notified of the hearing, proceed with the hearing in your absence and make any order that the Panel of the Discipline Committee could have made in your presence.

DATED this 30th day of October, 2024

AMENDED this 25th day of April, 2025.

The Investigation Committee of the Association
of Professional Engineers and Geoscientists of
the Province of British Columbia

<original signed by>

Per: Peter Helland, P.Eng.
Chair, Investigation Committee