

Introduction

Annex C of the standard ISO 10211¹ contains 2 two-dimensional test reference cases. In order to be classified as a two-dimensional steady-state high precision method, BISCO shall give results corresponding with those of these 2 cases.

Test reference case 1

BISCO data [validation_10211_case1.bsc](#)

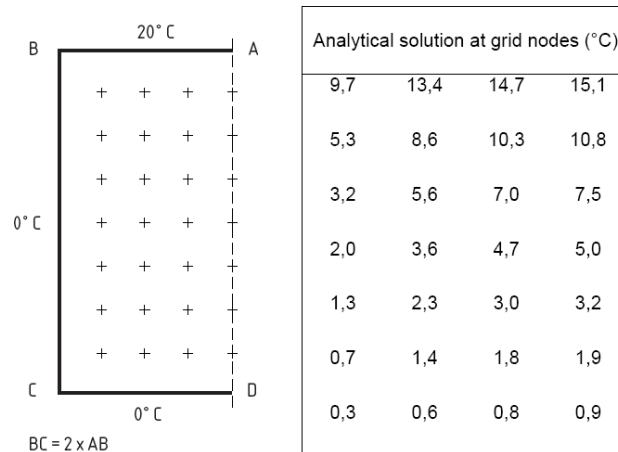


Figure 1. Test reference case 1 as listed in EN ISO 10211:2017

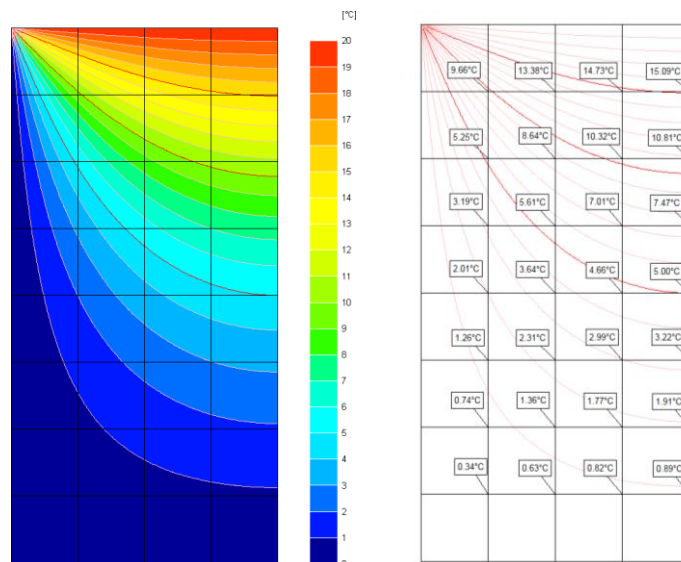


Figure 2. Results obtained by BISCO

Using a triangulation with 44443 nodes the grid temperatures obtained by BISCO rounded to 1 decimal are identical to the ones listed in the standard.

¹ EN ISO 10211:2017 - *Thermal bridges in building construction – Heat flows and surface temperatures – Detailed calculations*

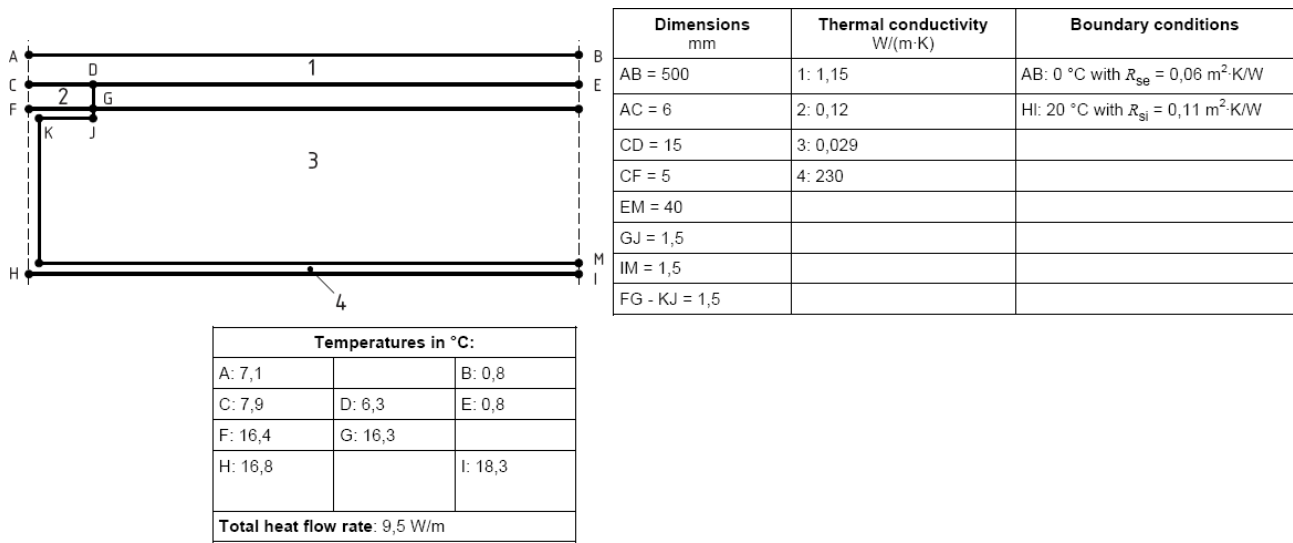


Figure 3. Test reference case 2 as listed in EN ISO 10211:2017

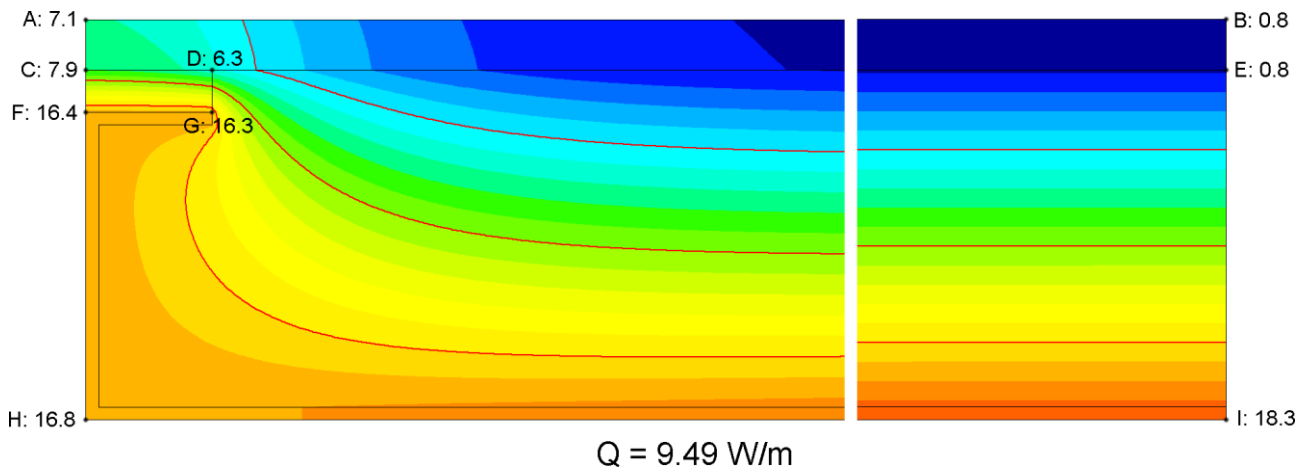


Figure 4. Results obtained by BISCO

Using a triangulation with 108950 nodes the grid temperatures obtained by BISCO rounded to 1 decimal are identical to the ones listed in the standard. The total heat loss rounded to 1 decimal (9.5 W/m) is identical to the one listed in the standard.